Montana Fish, Wildlife and Parks
Wildlife Division

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

CORNWELL RANCH CONSERVATION EASEMENT PROPOSAL

I. INTRODUCTION

Montana Fish, Wildlife & Parks (FWP) proposes to purchase a conservation easement on the Cornwell Ranch, which consists of approximately 24,000 acres of private land near Glasgow in northeastern Montana. The property includes thousands of acres of rangeland in the Buggy Creek drainage, along with a number of separate river bottom and hay land parcels generally located along the Milk River. Key habitats to be conserved by this proposed action are sagebrush grassland in the uplands and hardwood riparian forest along the stream bottoms. The proposed conservation easement reflects the desire of all parties to continue the landowner's agricultural operation as a working ranch, while maintaining and enhancing wildlife habitats. This easement will keep the property in private ownership and operation, preserve important wildlife habitats, and guarantee managed public hunting access.

II. AUTHORITY AND DIRECTION

Montana FWP has the authority under law (87-1-201) to protect, enhance, and regulate the use of Montana's fish and wildlife resources for public benefit now and in the future. In 1987, the Montana Legislature passed House Bill (HB) 526, which earmarked hunting license revenues to secure wildlife habitat through lease, conservation easement, or fee title, acquisition (87-1-241 and 242). This is now referred to as the Habitat Montana Program. As with other FWP property interest proposals, the Fish, Wildlife and Parks Commission and the State Land Board (for easements greater than 100 acres or $100,000) must approve any easement proposal by the agency. This Environmental Assessment (EA) is part of that decision making process.

III. LOCATION OF PROJECT

The Cornwell Ranch properties are located in both Valley and Phillips Counties. The properties located along the Milk River are found in numerous isolated land parcels, stretching along 50 miles of the Milk River Valley from approximately 2 miles southeast of Glasgow to 3 miles northwest of Saco. The uplands portions of the ranch extend north from the Milk River Valley up into the Bitter Creek Wilderness Study Area southwest of Opheim. The property consists of approximately 24,000 private acres, and the Cornwell Ranch also holds grazing leases on about 104,000 acres of adjoining state and federal lands (These state and federal lands are not included in the conservation easement, but are anticipated to participate in a cooperative grazing management plan). All of the private and public land is within deer/elk hunting district 630, 670 and 611. A map of the property is included in this document.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTION

The primary purpose of this action to preserve the integrity of the native habitats while continuing the land's traditional agricultural use and ownership. The habitats represented on the Cornwell Ranch include riparian corridors, wetlands and sagebrush grassland. The project also provides a unique landscape conservation opportunity, as the Cornwell Ranch contains over 10 miles of high-quality hardwood forest along Buggy Creek. Maintaining and improving the existing habitat will benefit game species, such as whitetail and mule deer, pronghorn antelope, sage and sharptail grouse, ring-necked pheasants, Merriam's turkeys, several species of ducks, and mourning doves. In addition, both the upland prairie and hardwood forest provide exceptional habitats for nongame species, including raptors and migratory songbirds. At-risk grassland bird species on the ranch include long-billed curlew, Sprague's pipit, chestnut-collared longspur, McCown's longspur, Baird's sparrow, and ferruginous and Swainson's hawks. The rare swift fox also inhabits the prairie habitat. Riparian habits support a diversity of warblers, vireos, flycatchers and other neotropical migrants.

A secondary purpose of this project is guaranteed public access to this ranch for hunting. A portion of the Cornwell Ranch has been in Block Management since 2001 using a hunter sign-in box management system. During the past 6 years an average of 321 hunter days have been recorded annually on this Block Management Area. In the past two years, almost 90 percent of the hunters who submitted comments on this BMA reported a positive hunting experience.

The need for this project is not established merely by habitats or wildlife, but also by threats to the traditional use of this land by farmers, hunters, fishermen, other recreationists, and wildlife. There are currently several farms in the Milk River Valley for sale at prices that prohibit the purchase of this land by local agricultural producers. These farms are being marketed based on their recreational values due to their close proximity to the Milk River. A conservation easement on the Cornwell Ranch would allow this land to remain locally owned and would keep traditional agricultural production as the primary use of this area. Resident and migrating wildlife species would benefit from the improved habitat conditions, while hunters would continue to have access to this land, the Milk River and Buggy Creek.

V. DESCRIPTION OF PROPOSED ACTION

The proposed action is for FWP to purchase, hold and monitor a conservation easement on up to 24,000 acres of the Cornwell Ranch. A cooperative grazing management plan on an additional 104,000 acres of adjoining state and federal land will also be implemented, upon approval of the federal Bureau of Land Management and the Montana Department of Natural Resources and Conservation,. The appraised value of the conservation easement is anticipated to be in the range of $4.75 - $5.25 million. FWP proposes to pay up to the appraised value for this permanent conservation easement. However, based on funding availability, FWP may offer the landowner an amount less than the final appraisal number, and the landowner will be able to decide whether to

accept the FWP offer. Based on funding availability and negotiations with the landowner, FWP's acquisition of the conservation easement may be concluded in a single transaction or may be spread over two closings. In either case, the final closing will be no later than calendar year 2008. Additionally, FWP will share in the cost of materials required to implement the grazing system, which is estimated to cost approximately $350,000. The primary funding sources for this project are Habitat Montana and the Upland Game Bird Habitat Enhancement Program, two FWP programs supported by hunting license revenues. Additional funding sources will include the Hi-Line North American Wetlands Conservation Act Grant, State Wildlife Grants Program, the Montana Fish and Wildlife Conservation Trust, and the Doris Duke Foundation.

Specific terms of the easement in their entirety are contained in a separate legal document, which is the "Deed of Conservation Easement". This document lists FWP and landowner rights under the terms of the easement, as well as restrictions on landowner activities. The rights of both parties and restrictions on landowner activities were negotiated with and agreed to by FWP and the landowner.

To summarize the terms of the easement, FWP's rights include the right to:
(1) identify, preserve and enhance specific habitats, particularly river bottom riparian and sagebrush/grasslands;
(2) monitor and enforce restrictions;
(3) prevent activities inconsistent with the easement;
(4) ensure public access for the purpose of recreational hunting. Hunting access for all sex and age classes of game animals and game birds during all established seasons will be maintained for a minimum of 1,100 hunter days each fall.

The Landowners will retain all of the rights in the property that are not specifically restricted and that are not inconsistent with the conservation purposes of the proposed easement, including the right to:
(1) pasture and graze livestock on the ranch in accordance with the rest rotation grazing system described in the Management Plan;
(2) maintain water resources;
(3) maintain the existing residence, sheds, corrals, and other improvements at the farmsteads located on the ranch;
(4) construct, remove, maintain, renovate, repair, or replace fences, roads and other non-residential improvements necessary for accepted land management practices.
(5) Develop wind energy in only one location on the property (an isolated 640 acres in the northeast portion of the property)
(6) Develop oil and gas resources (if present), subject to detailed site-specific stipulations and only in a manner compatible with conserving the properties habitat values.

The proposed easement will restrict uses that are inconsistent with the conservation purposes of the easement including the following uses of the property:

(1) vegetation removal, except by authorized grazing and related agricultural activities;
(2) draining or reclamation of wetland or riparian areas;
(3) residential development and subdivision (limited agricultural divisions are permitted);
(4) cultivation or farming beyond existing levels;
(5) outfitting or fee hunting;
(6) use of agrichemicals is restricted to the minimum amount necessary to control noxious weeds;
(7) installation of utility structures without FWP approval;
(8) mineral exploration, development, and extraction by surface mining or below the surface methods that would significantly impair conservation values;
(9) construction of permanent structures except as described above;
(10) commercial feed lots;
(11) establishment or operation of a game farm, game bird farm, shooting preserve, fur farm, menagerie or zoo;
(12) commercial or industrial use except traditional agricultural use;
(13) refuse dumping.

VI. DESCRIPTION OF REASONABLE ALTERNATIVES TO THE PROPOSED ACTION

The landowners wish to maintain this land as a traditional Montana working ranch, consistent with its establishment by the Cornwell family in 1892. No interest was expressed in a sale of fee title or a long-term lease. Since conservation easements are also FWP's preferred option, the only other alternative in this EA is the "No Action Alternative", under which FWP would not pursue the purchase of a conservation easement.

1. No Action Alternative

In the future, it is probable that this land could be sold for the primary purpose of recreational use due to its hunting opportunities and close proximity to the Milk River and Buggy Creek. There would be no guarantee of the preservation of current habitat values found on the property, and a future loss of public hunting opportunities would be a possibility, as rural Montana properties are increasingly being purchased for their private amenity values. The ranch would remain vulnerable to rural subdivision, as well as to potentially detrimental land use practices on the vegetative resources and commercialization of the property.

VII. EVALUATION OF IMPACTS ON THE PHYSICAL ENVIRONMENT

1. Land Resources

Impact of Proposed Action: No negative impacts would occur as a result of this proposal. The terms of the proposed easement are structured to prevent adverse impacts on soils and vegetation. A grazing plan has been developed and will be implemented that will enhance soil maintenance (Management Plan, Attachment A). Subdivision and development of the land is restricted, as is additional cultivation. The proposed easement will insure that the land resources are maintained.

No Action Alternative: Without terms of the proposed easement being structured to prevent adverse impacts on soils and vegetation, there would likely be no change in the short-term. However, if the land was developed or sold, disturbance of soils from more intense agricultural practices, residential development and other commercial uses could occur.

2. Air Resources

Impact of Proposed Action: There would be no impact.

No Action Alternative: There would be no immediate impact.

3. Water Resources

Impact of Proposed Action: Current agricultural uses on the property have proven to be compatible with maintenance of water quality. However, positive impacts should be realized in surface and ground water as a result of better water distribution and improvements in soil condition and reduction of erosion by developing and improving rest rotation grazing systems, and protecting riparian areas. Additional water improvements will be developed in order to improve livestock distribution, range conditions, and riparian vigor throughout the ranch. There would be no negative impact over what is currently associated with a working ranch operation.

No Action Alternative: There would likely be no impact in the short-term. However, if the land was developed or sold without conservation protection, there would be no assurances that over time the use of this property wouldn't change from ranching and farming to some other use.

4. Vegetation Resources

Impact of Proposed Action: This action would result in a positive impact. The terms of the easement protect the quantity, quality and character of the native plant communities found on the property. The prescribed grazing program will enhance and maintain the vigor and productivity of vegetation on the Cornwell Ranch properties. The proposed action also ensures the land's primary use in the future will be farming and livestock grazing, which depend on maintaining a productive vegetative resource. Noxious weed management will be an important component of a successful farm operation.

No Action Alternative: Without protections of the quantity, quality, and character of the native plant communities found on the property, there would likely be no change in the short-term. However, if the land was developed or sold, there would be no conservation measures in place to maintain the productivity of the land. Future impacts to native vegetation and overall productivity of the land could be significant. In addition, there would be no long-term protection of existing native plant communities.

5. Fish/Wildlife Resources

Impact of Proposed Action: This action will benefit a variety of wildlife. The terms of the easement conserve the land as agricultural and open space to provide year-round habitat for many of Montana's native wildlife species. Wildlife and agriculture can coexist well together as demonstrated in Montana today. Conserving native plant communities is important for most of Montana's indigenous wildlife species. Implementation of a rest-rotation grazing system will ensure adequate quantity and quality of forage and cover for a variety of wildlife species. No adverse effects are expected on the diversity or abundance of game species, non-game species or unique, rare, threatened or endangered species. There would be no barriers erected which would limit wildlife migration or daily movements. There would be no introduction of non-native species into the area.

No Action Alternative: Without terms to conserve the land as agricultural and open space to provide year-round habitat for many of Montana's native wildlife species, there would likely be no change in the short-term. However, there would be no provisions preventing development for recreational purposes. If this occurs, open space would diminish over time resulting in significant long-term negative effects to most species of wildlife. There would be no provisions preventing activities such as the construction of fences or other barriers that could inhibit wildlife

movement. Wildlife species would be negatively impacted by the conversion of existing native vegetation to other uses.

6. Adjacent Land

Impact of Proposed Action: No negative impact is expected. Existing fences would be maintained along the perimeter of the Cornwell Ranch. Public hunting access will help in managing wildlife populations to lessen agricultural damage to this and adjacent ranches. FWP will work with any adjacent landowners that perceive possible impacts.

No Action Alternative: There will not be a change in the short-term, but if the land was developed or sold, it could result in wildlife caused agricultural damage to adjacent private lands.

VII. EVALUATION OF IMPACTS ON THE HUMAN ENVIRONMENT

1. Noise/Electrical Effects

Impact of Proposed Action: No impact would occur over existing conditions.

No Action Alternative: There would be no immediate impact.

2. Land Use

Impact of Proposed Action: There would be no impact with the productivity or profitability of the ranch, nor conflicts with existing land uses in the area. The traditional uses of the land would be maintained under the Proposed Action.

No Action Alternative: If the land was developed or sold, it could affect habitat quality and current wildlife numbers. Public recreational opportunity would very likely be diminished.

3. Risk/Health Hazards

Impact of Proposed Action: No impact would occur.

No Action Alternative: No impact would occur.

4. **Community Impacts**

Impact of Proposed Action: There would be no anticipated negative impacts to the community. The scenic values and open character of this property would be maintained and enjoyed by the community in perpetuity. This issue is also addressed in the attached Socio-Economic Assessment.

No Action Alternative: Without protection of the scenic values and open character of this property being maintained for enjoyment by the public in perpetuity, hunting access and public access on this ranch would likely be restricted in the future, negatively affecting traditional recreational opportunities in the area.

5. Public Services/Taxes/Utilities

Impact of Proposed Action: There would be no effect on local or state tax bases or revenues, no alterations of existing utility systems nor tax bases of revenues, nor increased uses of energy sources. As an agricultural property, the land would continue to be taxed as it has before. This issue is also addressed in the attached Socio-Economic Assessment.

No Action Alternative: No immediate impact would occur. If rural subdivision did occur in this area in the future, greater demands would be placed on county resources.

6. Aesthetics/Recreation

Impact of Proposed Action: There would be no impact. The easement would maintain in perpetuity the quality and quantity of recreational opportunities and scenic vistas and would not affect the character of the neighborhood. This issue is also addressed in the attached Socio-Economic Assessment.

No Action Alternative: There would be no guarantee of continued public access to the land or across the land for recreational purposes. If rural subdivision and/or other developments occur it would reduce the aesthetic and recreational quality of the area. Future landowners would likely not be as generous with recreational access as the Cornwell Ranch.

7. Cultural/Historic Resources

Impact of Proposed Action: No impacts are anticipated. However, any surface disturbance associated with grazing improvements to be placed on state and federal land will be subject to any legally required cultural review.

No Action Alternative: Any future developments on this land would likely have an adverse impact on the cultural and historic values of this farm.

8. Socio-Economic Assessment

Please refer to the attached Socio-Economic Assessment for additional analysis of impacts on the human environment.

IX. SUMMARY EVALUATION OF SIGNIFICANCE

The proposed action should have no negative cumulative effect. However, when considered on a larger scale, this action poses a substantial positive cumulative effect on wildlife, range management, riparian habitats and open space. The ranch will remain in private ownership, continue to contribute to agricultural production and thus contribute to the local economy.

The "No Action Alternative" would not preserve the diversity of wildlife habitats in perpetuity. Without the income from the proposed conservation easement, the Cornwell Ranch or any successor owners might consider other income options including either selling the property or subdividing parts of it, or breaking native prairie for farming. Such land uses could directly replace wildlife habitat and negatively impact important public access to the ranch, Milk River and Buggy Creek.

X. EVALUATION OF NEED FOR AN EIS

Based on the above assessment, which has not identified any significant negative impacts from the proposed action, an EIS is not required and an EA is the appropriate level of review. The overall impact from the successful completion of the proposed action would provide substantial long-term benefits to both the physical and human environment.

XI. PUBLIC INVOLVEMENT

The public comment period will begin on May 8, 2008 and run through May 28, 2008. Written comments may be submitted to:

Montana Fish, Wildlife and Parks
Attn: Cornwell Ranch Conservation Easement
54078 Hwy 2 West
Glasgow, MT 59230

Or comments can be emailed to jelletson@mt.gov.

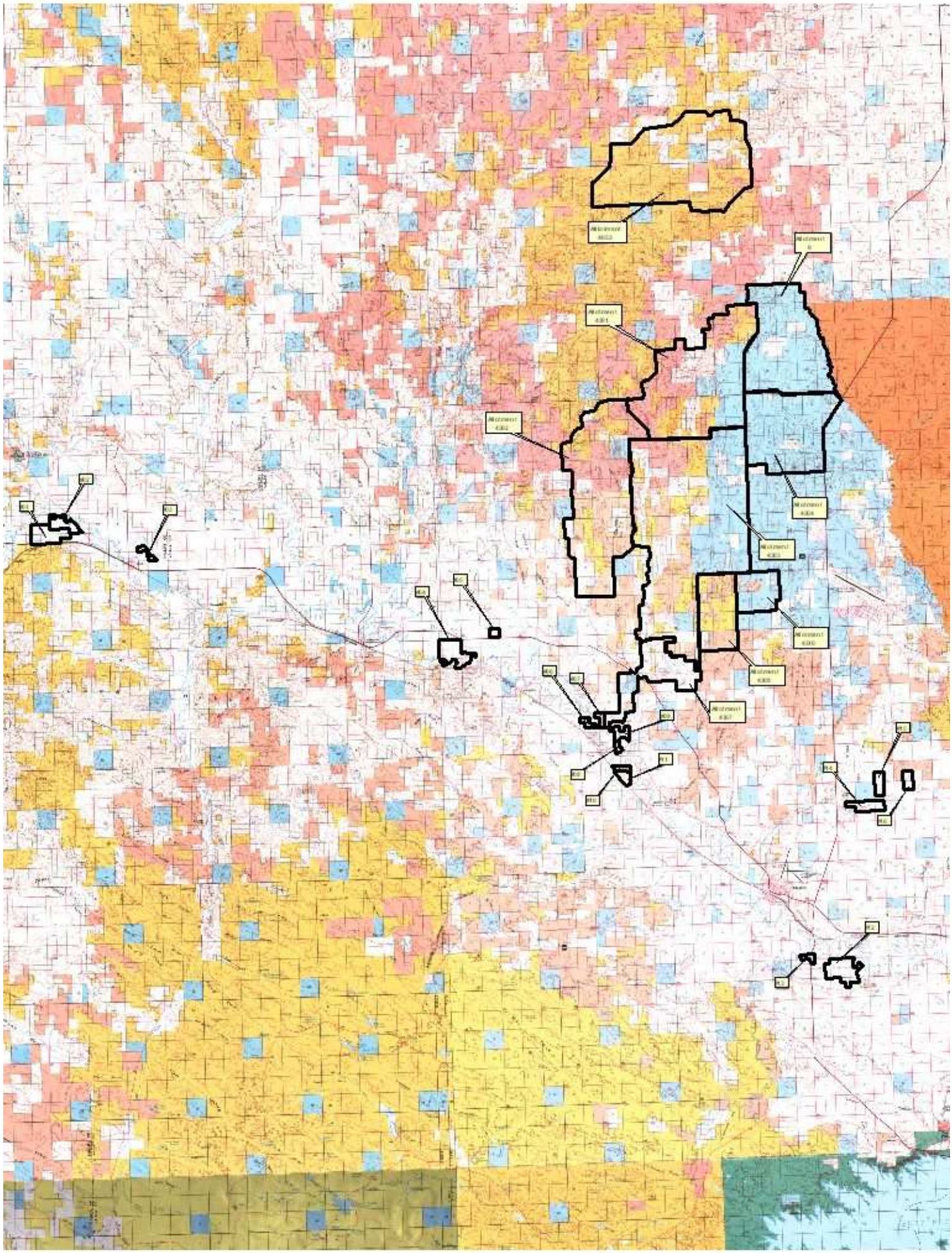
In addition, there will be a public hearing in Glasgow on May 28, 2008 at the Cottonwood Inn at 7:00 PM.

XII. NAME, TITLE AND PHONE NUMBER OF PERSON RESPONSIBLE FOR PREPARING THIS EA

Kelvin Johnson, Wildlife Management Biologist, Montana Fish, Wildlife, and Parks, 54078 Hwy 2 West, Glasgow, MT 59230, 406-228-3700.

APPENDIX I

Map of Entire Cornwell Ranch, including Private Lands, as well as Public Land Leases



APPENDIX II

Cornwell Ranch Conservation Easement

MANAGEMENT PLAN

A. INTRODUCTION

This conservation easement is based on the habitat values found on the Cornwell properties. This 130,000-acre working ranch is composed of approximately 24,000 private acres and roughly 104,000 state and federal acres. The ranch has over 11,300 private acres located within the Milk River and Beaver Creek flood plains, and Buggy Creek Valley. It contains 9 miles of Milk River frontage, 16 miles of Buggy Creek, 2 miles of Beaver Creek, 9 miles of the West Fork of Porcupine Creek, and has an estimated 190 acres of oxbows as associated wetlands. The ranch has over 13,400 private acres, located within the associated plains and shrub grassland drainages of Buggy Creek, as well as the creek valleys and associated plains grassland drainages of Canyon Creek, Rock Creek, Dry Fork Creek, and the West Fork of Porcupine Creek. According to Montana Fish, Wildlife and Parks (MFWP), the resource value of this property is high, based on the desirable quantities and qualities of productivity found within the riparian and wetland communities, grassland complexes, silver sage communities, and prairie streams located on this ranch. See "*Montana's Comprehensive Fish and Wildlife Conservation Strategy, Executive Summary, 2005*." Available at Montana Fish, Wildlife and Parks, 1420 East Sixth Avenue, Helena, MT 59620, or by internet at: http://fwp.mt.gov/specieshabitat/strategy/summaryplan.html, for details regarding these four complexes and communities.

Primary objectives of this conservation easement include: protection and enhancement of the riparian habitat associated with the Milk River and Buggy Creek; conserving the grassland complexes, silver sagebrush communities, and prairie streams associated with this ranch; continuing an active public access travel plan; and maintaining healthy wildlife populations within these habitats.

Because hunters are funding this easement, game species will be used as indicator species based on habitat availability and potential. In the riparian and wetland communities indicator game species are prioritized as follows: whitetail deer, ring-necked pheasants, Merriam's turkeys, mourning doves, and waterfowl. In the grassland complexes and silver sagebrush communities, game species are prioritized as follows: mule deer, antelope, sage grouse, and sharp-tail grouse. Additionally, State Wildlife Grants will provide FWP the opportunity to survey and inventory riparian-associated wildlife species in order to develop a baseline assessment of species richness and diversity.

The Cornwell's and MFWP intend to phase this management plan into place over the next 5 years. Once implemented in its entirety, the management plan will be revisited in order to reflect changes and/or adjustments that may have occurred during the implementation process.

B. GOALS, OBJECTIVES, PROBLEMS, AND STRATEGIES

GOAL: To protect and enhance the riparian habitat and associated uplands along the Milk River and Buggy Creek; and protect and enhance the grassland complexes, silver sage brush communities, and their associated northern glaciated prairie streams within the ranch boundaries; maximize hunter recreation on these lands; and preserve the overall integrity of these lands for future generations.

Objective 1. Practice proper stewardship, which translates to managing for improved soil composition, structure and productivity, and for the health and vigor of all vegetation communities, while positively impacting the traditional land uses.

Strategy 1. Maintain native Milk River and Buggy Creek riparian habitats, grassland complex and silver sagebrush habitats, and associated prairie streams for wildlife habitat through easement protections. Limitations will include standing tree removal, breaking of native habitats, and removal of riparian vegetation, subdivision, house-site construction, grazing management, and commercial feedlots.

Strategy 1a. Exhibit A1 describes the 3-pasture rest rotation-grazing plans for the uplands. Exhibit A2 describes the grazing plans for the Milk River Valley units. Cattle will be allowed throughout the property except on 660 acres of fenced out Milk River oxbows and riparian areas, CRP, proposed DNC, and proposed permanent vegetation. These areas are referred to as "Habitat Zones" (HZ's). Grazing may be allowed within HZ's as prescribed by FWP to manage the vegetation, except on 498 acres within HZ's, which have been permanently retired to all agricultural activity (or 1,041 additional acres if CRP acres are included). The Fall/Winter grazing systems will utilize existing pastureland, as well as domestic hay and cropped fields. Repair and extensions of existing fences will delineate separate pastures (Exhibit A1 and A2).

Strategy 1b. During harvest of existing grain fields, 12 inches of stubble will be left standing. These fields will be cropped annually, except in occasional years where weed control is needed and fields are left fallow. This strategy will allow additional cover for upland game birds, as well as food from grain missed during harvest.

Strategy 1c. The Cornwell's (Landowner) will control noxious weeds where needed.

Objective 2. When demand exists, provide a minimum of 450 hunter days for deer, 100 hunter days for antelope, 400 hunter days for upland game birds, 100 hunter days for waterfowl, and 50 hunter days for turkey. In addition, a minimum of 100 angler days will be provided if the demand exists.

Access Strategies

Strategy 2. Provide hunter recreation through the existing FWP Block Management program. Access will be walk-in only, or walk-in only from designated trails. By minimizing vehicular traffic, more secure areas for game species are provided during the hunting season. (Exhibit C, Travel Plan)

Strategy 2a. Montana FWP will pursue agreements with adjacent landowners to allow hunter access for harvesting all available species.

Strategy 2b. Provide liberal season structures for all species. This will allow sportsmen the full opportunity to utilize this area for hunting to maintain healthy wildlife populations.

Habitat strategies

Strategy 2c. Healthy populations of upland game birds will result with the implementation of Strategies 1, 1a, 1b, and 1c. These strategies will provide quality nesting, brood rearing, and winter cover for these birds. These strategies will also provide improved year round habitat for whitetail deer, mule deer, and antelope, especially for fawning and security habitat, and will conserve and enhance crucial winter habitat for mule deer and antelope populations in northern Valley County.

Strategy 2d. Montana FWP and the Landowner will provide both wildlife habitat and efficient irrigation flows through the irrigation canals. This strategy will improve habitat by allowing vegetation on the outside banks of the canals to remain in the form of nesting and brood-rearing cover. Vegetation on the inside of canals will be controlled by the landowner by either mowing, or some other mechanical means to facilitate water flow.

Strategy 2e. Implement FWP's Upland Game Bird Habitat Enhancement strategies on several areas as outlined in Exhibit B, Proposed Enhancements. These include grazing systems, shelterbelts, DNC fields, fencing riparian areas and food plots. Implementation of this strategy will enhance upland game bird habitat quantity and quality. This strategy will also benefit whitetail deer, mule deer, antelope, waterfowl, and non-game species through improved habitat conditions. Food plots will be left each fall after harvest. Existing agriculture fields will be designated for conversion into DNC and into permanent woody vegetation. Shelterbelt opportunities will be explored. There will be 23 fields composed of 463 acres retired into DNC, 24 fields composed of 917 acres retired into permanent cover, and 7 areas composed of 498 acres fenced off from livestock activity (or 1,041 additional acres if CRP acres are included).

Objective 3. Maintain healthy wildlife populations within the available habitats, taking into account the negative impacts wildlife may cause on nearby private lands.

Strategy 3. Maintain healthy, managed whitetail deer, mule deer, and antelope populations through the use of liberal hunting seasons. This strategy will be utilized.

Strategy 3a. On river units, the Block Management plan for this ranch will provide areas of security for whitetail deer during the hunting season. On upland units, the Block Management plan for this ranch will provide areas of security for mule deer and antelope during the hunting season. These strategies will assist in keeping deer from moving onto adjacent ranches that allow limited or no hunter access. These practices are currently

utilized on the portion of the ranch enrolled in the Block Management Program, and these practices will be initiated in the 2008-hunting season on the entire ranch.

Strategy 3b. Montana FWP will pursue agreements with adjacent landowners to allow hunter access for harvesting whitetail deer on river units. This strategy will be an ongoing effort to alleviate depredation problems with whitetail deer in the area.

Objective 4. Provide non-hunting recreational and educational opportunities to the public through the viewing of wildlife, fishing, and various educational uses.

Strategy 4. Public opportunity for wildlife viewing will be enhanced through the Strategies found in Objective 1, as well as Strategies 2d and 2e. Improved populations of game and non-game species of birds and mammals will result from these habitat improvements and provide for public viewing. Access for wildlife viewing will continue to be on a permission basis from the Landowner.

Strategy 4a. Provide a minimum of 100 angler days of fishing. Fishing opportunities exist along the Milk River. Game fish commonly found in these areas include channel catfish, northern pike, and walleye. Fishing opportunities for the public will continue to be available through controlled access by the Landowner.

Strategy 4b. The Landowner may allow the property to be utilized for educational purposes associated with schools and various organizations. This conservation easement will demonstrate how traditional land uses can be implemented in a manner that benefits wildlife while maintaining a successful agricultural operation.

Exhibit A1

Cornwell Ranch Grazing Plan: Portion of Ranch North of U.S. Highway 2

Prepared by Mike Frisina and Kelvin Johnson in consultation with Lee Cornwell, Lynn Cornwell; Steve Klessens (BLM), and Beth Klempel (BLM); and Hoyt Richards (DNRC) and Trevor Rysgaard (DNRC).

Introduction

This plan for livestock grazing on the Cornwell Ranch applies to lands lying north of US Highway 2. A separate plan is being prepared for lands lying south of US Highway 2. The north portion of the ranch consists of 7 units (Fig. 1) that are further divided into 30 pastures (Fig. 2). The ranch is a mix of BLM and DNRC grazing allotments and Cornwell deed lands. Mixed ownership, and the fact that the Cornwells raise several different classes of livestock on the ranch, made it necessary to separate the ranch into a series of linked units and pastures.

Stocking Rate

This grazing plan does not address stocking rate. Stocking rate will ultimately be determined by the BLM and DNRC on their allotments leased by the Cornwells. On deeded lands covered by the easement and those deeded lands incorporated into the state and federal allotments, the maximum stocking rate will be based on compliance with the grazing system. As long as the Cornwells can graze livestock and remain in compliance with the grazing system MFWP will not be concerned about the stocking rate. Currently the Cornwells maintain approximately 4,500 – 5,000 head of cattle and about 50 horses on the ranch. Horse grazing will also conform to the grazing system scheduled rotation. Horses may graze in any pasture within the dates the pasture is scheduled for grazing in a particular year.

Lands leased by the Cornwells and included in this grazing system are done so in cooperation with the BLM and DNRC. The easement restrictions do not apply to BLM and DNRC lands. They only apply to deeded lands specifically covered by the easement.

Grazing Dates

The grazing dates listed in the rotation schedule (Table 1) represent “outside” dates in which cattle grazing is scheduled for a pasture in a particular year. In a particular year, livestock may not always be in the pasture for the entire time period specified since the BLM or Cornwells may have more specific dates that pertain to the pasture or a sub-pasture. However, these “outside” dates are coordinated with the BLM allotment management plan so that when grazing occurs in a pasture it will be within the outside dates described in Table 1. In addition, Cornwell’s and FWP have agreed upon grazing dates set forth in a few situations where grazing systems within the ranch diverge slightly from traditional FWP standards for grazing (Exhibit C).

When necessary, the stockman may allow some limited livestock grazing in pastures scheduled for A and A* grazing treatments (Table 1.) after seed-ripe occurs. This will be allowed only when adequate AUMs remain following completion of the prescribed grazing treatment. In the Corridor Unit the Cornwells will do this at their discretion but for other units covered by the grazing plan approval is required from the BLM and MFWP.

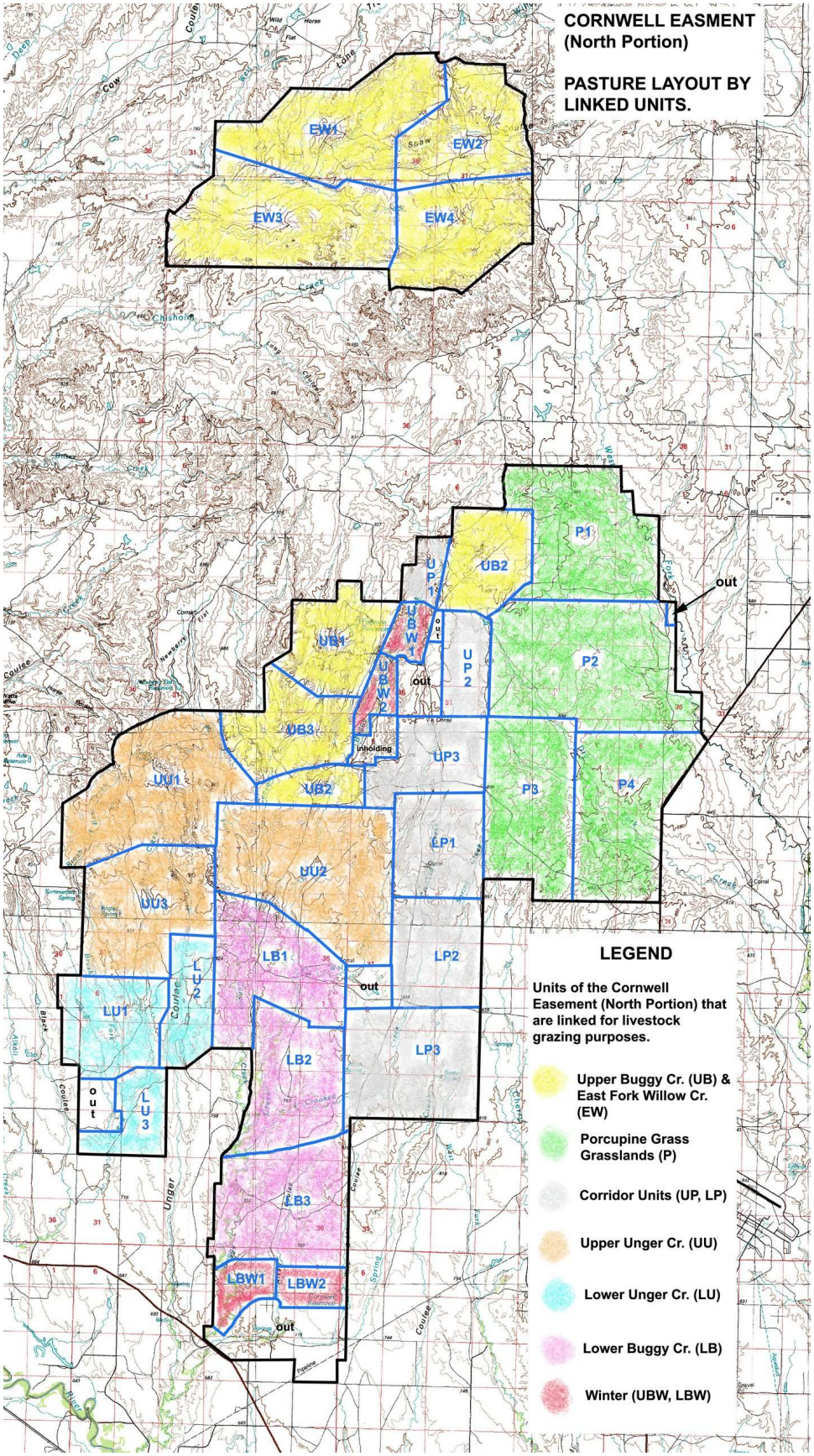


Figure 1. Units of the Cornwell Ranch (north portion) linked for grazing purposes.

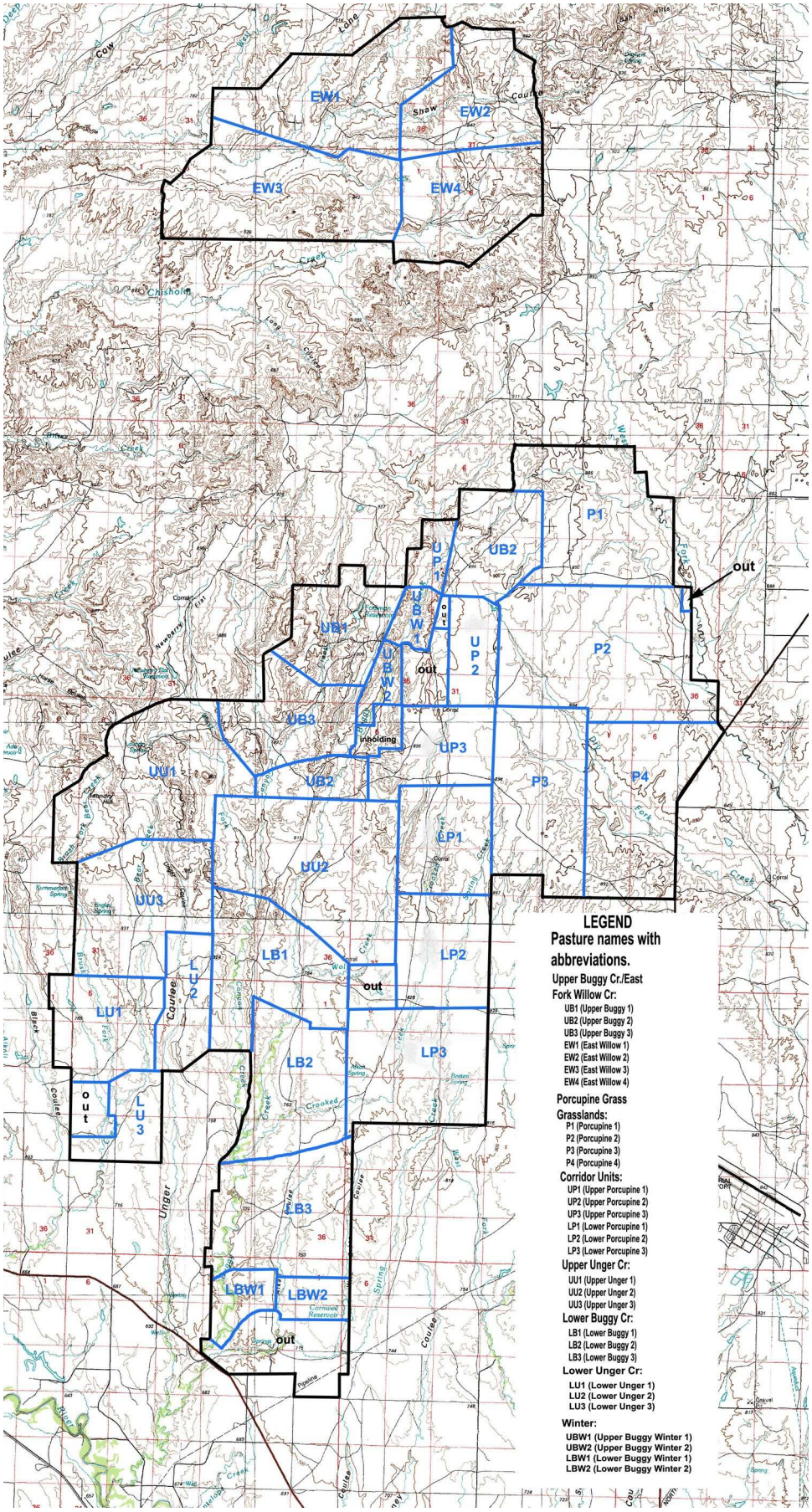


Figure 2. Layout of grazing system pastures on the Cornwell Ranch (north portion).

Table 1. Cornwell Ranch Easement grazing system rotation schedule for that portion of the ranch lying north of U.S. Highway 2.

	Pastures																		
Year	**LU1**	**LU2**	**LU3**	**LB1**	**LB2**	**LB3**	**LP1**	**LP2**	**LP3**	**UP1**	**UP2**	**UP3**	**P1**	**P2**	**P3**	**P4**	**UU1**	**UU2**	**UU3**
1	**A***	**B**	**C**	**A+**	**B**	**C'**	**A***	**B**	**C**	**A***	**B**	**C**	**A'**	**A**	**B**	**C**	**A***	**B**	**C**
2	**B**	**C**	**A***	**B**	**C'**	**A+**	**B**	**C**	**A***	**B**	**C**	**A***	**A**	**B**	**C**	**A'**	**B**	**C**	**A***
3	**C**	**A***	**B**	**C'**	**A+**	**B**	**C**	**A***	**B**	**C**	**A***	**B**	**B**	**C**	**A'**	**A**	**C**	**A***	**B**
4	**A***	**B**	**C**	**A+**	**B**	**C'**	**A***	**B**	**C**	**A***	**B**	**C**	**C**	**A'**	**A**	**B**	**A***	**B**	**C**
5	**B**	**C**	**A***	**B**	**C'**	**A+**	**B**	**C**	**A***	**B**	**C**	**A***	**A'**	**A**	**B**	**C**	**B**	**C**	**A***
6	**C**	**A***	**B**	**C'**	**A+**	**B**	**C**	**A***	**B**	**C**	**A***	**B**	**A**	**A**	**C**	**A'**	**C**	**A***	**B**

Table 1 (Continued). Cornwell Ranch Easement grazing system rotation schedule for that portion of the ranch lying north of U.S. Highway 2.

	Pastures										
Year	**UB1**	**UB2**	**UB3**	**EW1**	**EW2**	**EW3**	**EW4**	**LBW1**	**LBW2**	**UBW1**	**UBW2**
1	**A***	**B**	**C**	**A***	**B**	**B**	**C**	**D**	**C**	**D**	**C**
2	**B**	**C**	**A***	**B**	**B**	**C**	**A***	**C**	**D**	**C**	**D**
3	**C**	**A***	**B**	**B**	**C**	**A***	**B**	**D**	**C**	**D**	**C**
4	**A***	**B**	**C**	**C**	**A***	**B**	**B**	**C**	**D**	**C**	**D**
5	**B**	**C**	**A***	**A***	**B**	**B**	**C**	**D**	**C**	**D**	**C**
6	**C**	**A***	**B**	**B**	**B**	**C**	**A***	**C**	**D**	**C**	**D**

A= Livestock grazing from May 15 to August 1.
A'= Livestock grazing from April 1 to May 15.
A+ = Livestock grazing from April 1 to June 15.
A*= Livestock grazing from April 1 to August 1.
B= Livestock grazing from August 1 to December 1.
C= Rest from livestock grazing for the year.
C'=Rest from livestock grazing beginning May 16.
D= Livestock grazing from December 1 to May 15.

The grazing rotation schedule described in Table 1 is tentative and may require adjustment depending on the implementation of scheduled range improvements, especially water development. The grazing system will be phased in over a 6-year period starting in 2008 and will thus be fully operational in 2013. In 2013 a revised multi-year grazing schedule will be incorporated into the easement Management Plan. Table 2 is intended to serve as a guide until 2013 and how well it can be conformed to will depend on how long it takes to complete various livestock water improvements.

Range Improvements

In order for the grazing system to operate the range improvements described below are essential. Fence construction needs are summarized in Table 2.

Table 2. Fence construction needs for the north portion of the Cornwell Easement.

Miles Of Fence To Be Constructed				
Ranch Unit	**Deeded**	**DNRC**	**BLM**	**Totals**
Porcupine Grasslands	1.75	5.75	0	7.5
Upper Buggy Cr.	0	0	0	0
Lower Buggy Cr.	.25	0	0	.25
Corridor Unit	1.25	0	0*	1.25
Totals	**3.25**	**5.75**	**0**	**9.0**

*During 2007 BLM will construct a 1.75-mile fence to create pastures UP1 and UB2. Since this fence was already funded it was not included in the table.

Fence improvements will be cost shared at a 50:50 ratio between FWP and the Cornwell's. At $5,000 per mile for barbed wire fence we can estimate the total cost for required fences in the north portion of the Easement to be $45,000 (9.0 miles). Total cost required for fences in the south portion of the Easement are estimated to be $83,000 (16.6 miles).

Water Development

It is essential that an extensive water system be developed for the Porcupine Grass, Corridor and Lower Buggy Units. This will involve drilling deep wells on Cornwell deeded lands at 2 locations: one at the Langen Place (appx. 900 feet deep) and the other in the Horse Pasture (S1/2 S31, T32N R39E, appx. 850 feet deep). The estimated well depths should be considered maximum depths expected and were arrived at in consultation with the Montana Bureau of Mines, Butte, Montana. Water improvements will also be cost shared at a 50:50 ratio between FWP and the Cornwell's. At $45.00 per foot the estimated cost for drilling the two wells is $78,750. These wells are essential and will provide water to livestock in several different pastures. Cost estimations for all improvements, including water wells, pipelines, and tanks, and fencing is approximately $350,000.

Summary by Ranch Unit (Figure 1)

Unit: East Fork Willow Creek.

Continue with 4-pasture rest-rotation grazing system implemented by the BLM. Each year 1 pasture is grazed during the growing season, 2 pastures are grazed after seed-ripe, and one pasture is rested (Fig. 2, Table 1).

Each year grazing rotation dates are: One pasture available for grazing from April 1 to August 1; 2 pastures available for grazing from August 1 to December 1; and 1 pasture rested from livestock grazing for the entire year.

In this allotment there are limitations as to what can be done because a significant portion of it is within the federal *Bitter Creek Wilderness Study Area*. Cattle cow-calf pairs are the primary class of livestock that graze in this system. This allotment is a combination of BLM and Cornwell Ranch deeded lands (BLM Allotment 4053). Pasture designation on maps are **EW1, EW2, EW3, EW4** (Fig. 2).

Unit: Porcupine Grasslands.

DNRC Allotments 0 and 4304 will be managed as a 4-pasture rest-rotation grazing system. Lands owned by the Cornwell Ranch are within the boundaries of the DNRC Allotments. Approximately 1,100 yearling cattle and about 550 heifers (first calvers) will be maintained in this system.

Each year grazing rotation dates for the 4-pasture system are: One pasture will be available for grazing from April 1 to May 15; 1 pasture will be available for grazing from May 15 to August 1; 1 pasture will be available for grazing from August 1 to December 1; and 1 pasture will be rested.

Range Improvements: Currently there are very limited range improvements in this unit. It will be necessary to build about 7.5 miles of new fence (1.75 miles on deeded lands, 5.75 miles on DNRC lands) to create the 4-pasture grazing system (Table 2.). It is necessary to create an extensive water pipeline/tank system from a well to be drilled on the Langen place. It will not be possible to establish the grazing system without this water system.

Unit: Upper Buggy Creek.

Cattle cow-calf pairs will be the main class of livestock grazed in this unit. The crested wheatgrass field in this unit will be used at the landowner's discretion. A large corral area around the Langen buildings will also be used at the landowner's discretion. A BLM contribution is a 1.75-mile fence that will be constructed in the very near future creating a boundary between pastures **UP1** and **UB2**. Construction will be funded by the BLM. When creating the grazing

rotation schedule for this pasture it will be important to make the grazing dates for **UP1** and **UB2** the same annually (Fig 2, Table 2). Within the Upper Buggy Creek unit there will be a 3-pasture rest-rotation grazing system and a 2-pasture winter grazing system. Pasture references are **UBW1** and **UBW2** for the winter system and **UB1**, **UB2**, and **UB3**, for the summer-fall system (Fig 2). A portion of this unit will be used for 3 pastures in the corridor area (see Fig 2. and pastures **UP1**, **UP2**, **UP3**).

Yearly grazing rotation dates: Winter pastures (**UBW1**, **UBW2**): One pasture will be available for grazing from April 1 to May 15 and from August 1 to December 1 the same year; and 1pasture will be rested. Grazing use will be alternated from year to year.

Yearly grazing rotation dates for summer/fall pastures (**UB1**, **UB2**, **UB3**): One pasture will be available for grazing from April 1 to August 1; 1 pasture will be available for grazing from August 1 to December 1; 1 pasture will be rested from grazing for the entire year.

Grazing dates for corridor pastures **UP1, UP2, UP3** are described in the corridor section of this plan.

Unit: Corridor Pastures.

There are 6 corridor pastures essential to facilitate the movement of livestock to and from the ranch headquarters and to various portions of the ranch during the different seasons. The 6 corridor pastures are managed as 2 3-pasture systems.

One set of corridor pastures is Upper Corridor pastures **UP1**, **UP2**, **UP3**. Yearly dates for grazing these pastures are as follows: One pasture will be available for grazing from April 1 to August 1; 1 pasture will be available for grazing from August 1 to December 1; and 1 pasture will be rested from livestock grazing for the year.

The other set of corridor pastures are Lower Corridor pastures **LP1**, **LP2**, **LP3**. Yearly dates for grazing these pastures are as follows: One pasture will be available for grazing from April 1 to August 1; 1 pasture will be available for grazing from August 1 to December 1; and 1 pasture will be rested from grazing for the year. Each year, if adequate forage is available a limited amount of grazing may occur during late summer (after seed-ripe) in the two corridor pastures schedule for grazing from April 1 to August 1.

It is important to that the grazing dates for pastures **UB2** and **UP1** match each year; they should be grazed at the same time of year.

Range Improvements: 1.25 miles of new fence will be built on deeded land to separate pastures **UP3** and **UB2.** Water development is needed for pastures **UP1**, **UP2**, **UP3**.

Unit: Lower Buggy Creek.

It will be necessary to drill at least one well to water the lower Buggy Creek pastures. It might be possible to water the southernmost lower Buggy Creek Pasture (**LB3**) by pumping water from an existing well near the ranch headquarters.

Create 2 winter pastures **LBW1**, **LBW2** (Fig. 2). Each year one pasture will be available for grazing from December 1 to May 15. The other pasture will be rested.

Lower Buggy Creek 3-pasture system: Using the existing 3 pastures, a rotation system will be developed. In order to manage livestock in this area, which is near the ranch headquarters, it is essential that 2 pastures be available each year for winter/early-spring grazing. It is not realistic to develop more pastures at this time. By following the rotation prescription described below each pasture will only be grazed once during the primary portion of the plant growing season every third year (April 1-June 15). The April 1 to May 15 grazing treatment ends about the time native wildland grasses begin to grow significantly, thus it is essentially winter or non-growing season grazing.

The 3 pastures for this system are **LB1**, **LB2**, **LB3**. Each year 1 pasture will be available for grazing from April 1 to June 15; 1 pasture will be available for grazing from August 1 to December 1 and from April 1 to May 15 the next calendar year; 1 pasture will be rested from May 15 to April 1 of the following year.

Following is an example of how the timing of grazing will occur on a multi- year basis:

	Pasture LB1	Pasture LB2	Pasture LB3
Year 1	April 1 - June 15	Aug 1 - Dec 1[2]	Rest (beginning May 16[1])
Year 2	Aug 1 - Dec 1[2]	Rest (beginning May 16[1])	April 1 - June 15
Year 3	Rest (beginning May 16[1])	April 1 - June 15	Aug 1 - Dec 1[2]
Year 4	April 1 - June 15	Aug 1 - Dec 1[2]	Rest (beginning May 16[1])

[1] **Pasture will be rested from May 16 to end of year. However, livestock may be in the pasture from April 1 – May 15 prior to rapid growth.**

[2] Cattle are gone from this grazing system from June 15 to August 1.

Range Improvements: Build .25 miles of new fence (**LBW1**). Considerable water development will be needed, but has yet to be determined.

Note: It is recognized the grazing system for Lower Buggy Creek is the best that can be done at this time, but the additional grazing improvements will be pursued as additional grazing opportunities are explored and/or obtained in the future.

Unit: Lower Unger Creek

Lower Unger Creek pastures are (**LU1**, **LU2**, **LU3**). A 3-pasture grazing system utilizing existing pastures and range improvements will be maintained in this unit.

The yearly grazing rotation will be as follows: One pasture will be available for grazing from April 1 to August 1; 1 pasture will be available for grazing from August 1 to December 1; and 1 pasture will be rested for the year.

Unit: Upper Unger Creek

Upper Unger Creek Pastures are (**UU1, UU2, UU3**). A 3-pasture grazing system utilizing existing pastures and range improvements will be maintained in this unit.

Yearly grazing dates will be as follows: One pasture will be available for grazing from April 1 to August 1; 1 pasture will be available for grazing from August 1 to December 1; and 1 pasture will be rested for the year

EXHIBIT A1 Appendix

Summary table of various "outside" dates for scheduled grazing treatments of pastures in the grazing system.

Grazing Treatment Symbol	Dates for Grazing by Livestock
A	May 15 to August 1
A'	April 1 to May 15
A+	April 1 to June 15
A*	April 1 to August 1
B	August 1 to December 1
C	Rest from livestock grazing for the year
C'	Rest from livestock grazing April 1 to May 15
D	December 1 to May 15

Exhibit A2

Cornwell Ranch Grazing Plan:
Portion of Ranch South of U.S. Highway 2

Saco Area: Units #01, #02, #03.

A habitat zone fence will be constructed to protect proposed permanent cover areas along the northwest boundary (HZ1), and also along proposed permanent cover areas in the middle of Unit #01 (HZ2). A total of 2.3 miles of fence will need to be constructed in order for this system to work.

Unit #03 is currently does not receive winter grazing. However, the option to exercise winter grazing in the future will be provided to the landowner should this unit be needed to provide winter grazing pressure relief from Units #01, and #02. In the event this unit is used for grazing, a habitat zone fence will be constructed in the northwest portion of the unit to protect the proposed permanent cover (HZ3). Additional fence will be constructed along the south and east boundaries of this unit. A total of 2.4 miles of fence will need to be constructed in order for this system to work. Water development will also be required.

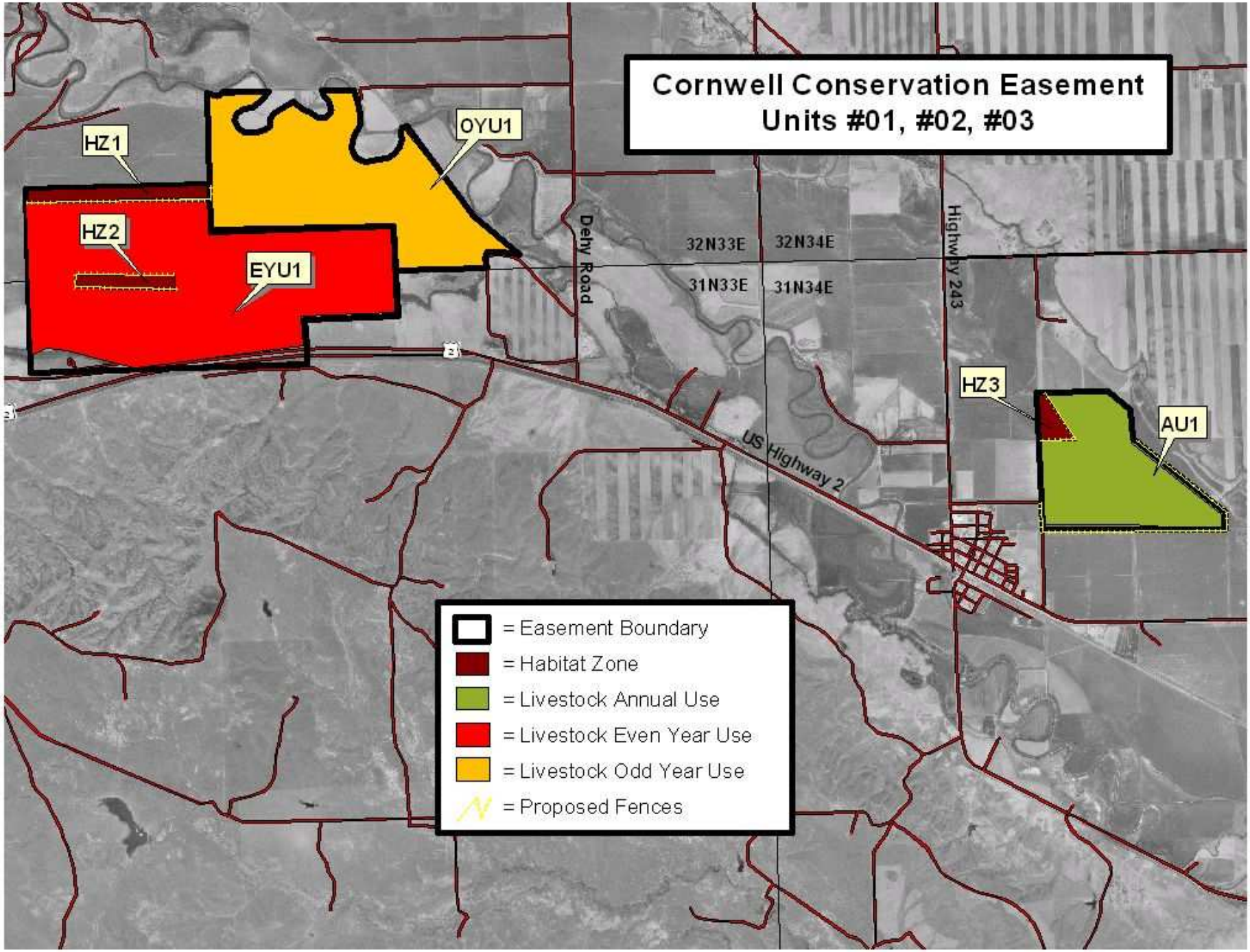
Livestock will be permitted within the designated "Livestock Annual Use" area (AU1) each year, between the starting date of November 15 and ending date of April 15, annually. Livestock will be permitted within the designated "Even Year Use" area (EYU1) every even year, and will be permitted within the designated "Odd Year Use" area (OYU1) every odd year, between the starting date of November 15 and ending date of April 15. Livestock will not be permitted within designated "Habitat Zones" (HZ1, HZ2, HZ3).

Dense Nesting Cover fields (DNC) located within OYU1 will be hayed every odd year after July 15, and DNCE fields located within EYU1 will be hayed every even year after July 15. Winter livestock grazing will then be allowed in the hayed DNC fields according to the prescribed grazing schedule.

Refer to Table 1 for an illustrated demonstration of the fall/winter grazing system during the 10-year period from 2008 to 2017. Pasture designations HZ1, HZ2, HZ3, AU1, EYU1, and OYU1 are illustrated in the grazing plan aerial photo.

Exhibit A2: Table 1

	Units #01, #02, #03					
Year	**HZ1**	**HZ2**	**HZ3**	**AU1**	**EYU1**	**OYU1**
2008	No	No	No	Yes	Yes	No
2009	No	No	No	Yes	No	Yes
2010	No	No	No	Yes	Yes	No
2011	No	No	No	Yes	No	Yes
2012	No	No	No	Yes	Yes	No
2013	No	No	No	Yes	No	Yes
2014	No	No	No	Yes	Yes	No
2015	No	No	No	Yes	No	Yes
2016	No	No	No	Yes	Yes	No
2017	No	No	No	Yes	No	Yes


Cornwell Conservation Easement
Units #01, #02, #03
HZ1
OYU1
HZ2
EYU1
Dehy Road
32N33E
32N34E
31N33E
31N34E
Highway 243
HZ3
AU1
US Highway 2
= Easement Boundary
= Habitat Zone
= Livestock Annual Use
= Livestock Even Year Use
= Livestock Odd Year Use
= Proposed Fences

Hinsdale Area: Units #04, #05.

A habitat zone fence will be constructed to protect proposed permanent cover along the northern portion of Unit #04, and an additional fence will be constructed in the southeast portion of this unit to create the boundary between EYU3 and OYU2. No fencing will be required in Unit #05. A total of 1.8 miles of fence will need to be constructed in order for this system to work.

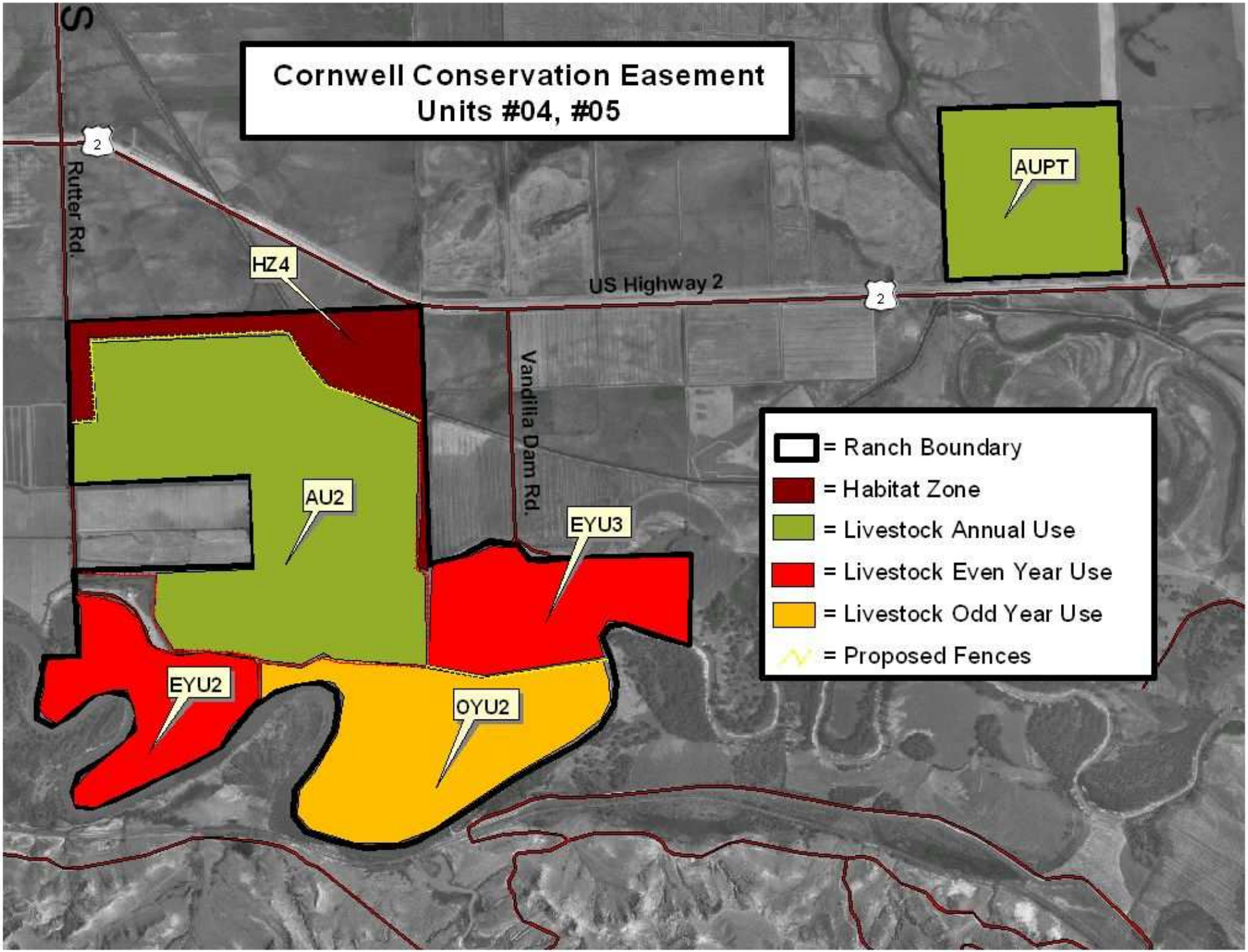
In Unit #04, livestock will be permitted within the designated "Livestock Annual Use" area each year, between the starting date of November 15 and ending date of April 15, annually. This includes area labeled AU2. Livestock will be permitted within the designated "Even Year Use" areas (EYU2, EYU3) every even year, and will be permitted within the designated "Odd Year Use" area (OYU2) every odd year, between the starting date of November 15 and ending date of April 15. Livestock will not be permitted within designated "Habitat Zone" (HZ4).

Unit #05 will serve as a "pass through" pasture every spring and fall for an approximate length of 1 week, each season. This unit is used to trail cattle between their winter pasture (Unit #04) and their summer pastures located north of Highway 2. It also serves as an escape pasture, in the event the Milk River floods. This has occurred only twice in the past 20 years.

Refer to Table 2 for an illustrated demonstration of the fall/winter grazing system during the 10-year period from 2008 to 2017. Pasture designations LEZ5, LEZ6, AU3, and AUPT are illustrated in the grazing plan aerial photo.

Exhibit A2: Table 2

	Units #04, #05					
Year	**HZ4**	**AU3**	**AUPT**	**EYU2**	**EYU3**	**OYU2**
2008	No	Yes	Yes	Yes	Yes	No
2009	No	Yes	Yes	No	No	Yes
2010	No	Yes	Yes	Yes	Yes	No
2011	No	Yes	Yes	No	No	Yes
2012	No	Yes	Yes	Yes	Yes	No
2013	No	Yes	Yes	No	No	Yes
2014	No	Yes	Yes	Yes	Yes	No
2015	No	Yes	Yes	No	No	Yes
2016	No	Yes	Yes	Yes	Yes	No
2017	No	Yes	Yes	No	No	Yes


Cornwell Conservation Easement
Units #04, #05
S
Rutter Rd.
2
US Highway 2
2
Vandilia Dam Rd.
HZ4
AUPT
AU2
EYU3
EYU2
OYU2
= Ranch Boundary
= Habitat Zone
= Livestock Annual Use
= Livestock Even Year Use
= Livestock Odd Year Use
= Proposed Fences

Tampico Area: Units #06, #07, #08, #09, #10, #11, #4307, and Ozark

In Unit #06, a habitat zone fence will be constructed in the northwest corner to protect a wetland (HZ5), and an additional fence will be constructed along the Milk River along its eastern boundary to protect riparian zones. Additional riparian habitat zone fencing will be constructed along the east and south boundaries of Units #08 and #09 to protect the Milk River riparian zone (HZ7), and fencing will be repaired along the east portion of Units #10 and #11 to protect the existing oxbow shared with the Page-Whitham easement (HZ8). A total of 2.7 miles of fence will need to be constructed in order for this system to work.

Livestock will be permitted within designated "Even Year Use" areas (EYU4, EYU5, EYU6) every even year, and will be permitted within designated "Odd Year Use" areas (OYU3, OYU4, OYU5, OYU6) every odd year, between the starting date of November 15 and ending date of April 15. Note, OYU6, the Ozark Place owned by the Cornwell Ranch, is not included in this easement, is therefore not limited by this plan, yet provides opportunity for this plan to work.

Livestock will not be permitted within the designated "Habitat Zones" (HZ5 and HZ8). However, livestock will be permitted within HZ6 and HZ7 for one season, starting November 15 and ending April 15, once every 6 to 8 years to address vegetation management (as indicated in Exhibit A2: Table 3.)

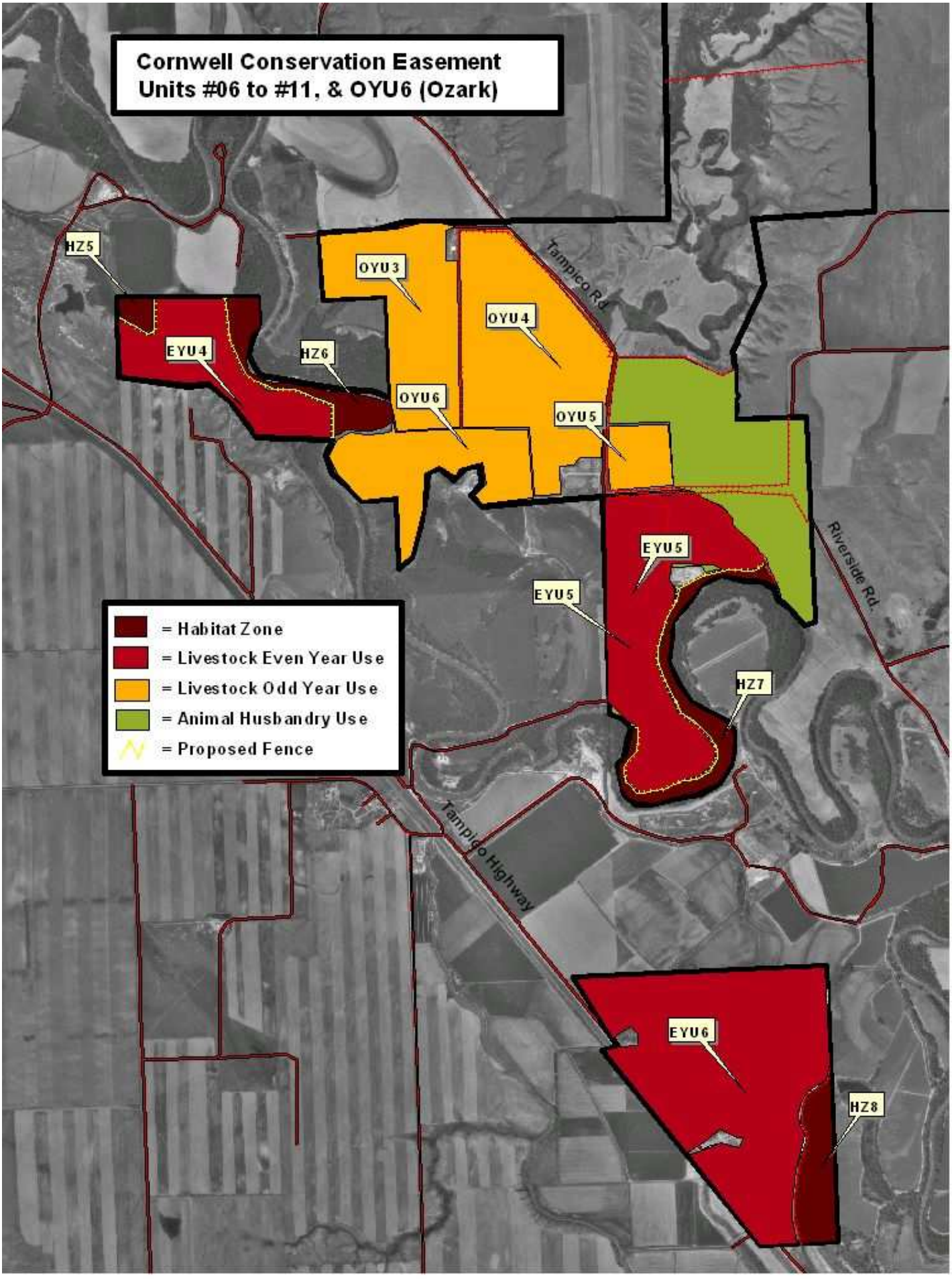
It is important that EYU4 and EYU5 contain wooded and/or sheltered areas that can provide protection from winter storms. These areas will be determined when habitat zone fences are constructed. Selected sites should have adequate over story to provide needed protection, but will be lacking an intact under story (shrubs, seedling trees, and pole-size trees). These sites will meet livestock needs; yet will not compromise additional riparian habitat.

Dense Nesting Cover fields (DNC) located within OYU4 and OYU5 will be hayed every odd year after July 15, and DNCE fields located within EYU5 will be hayed every even year after July 15. Winter livestock grazing will then be allowed in the hayed DNC fields according to the prescribed grazing schedule.

Refer to Table 3 for an illustrated demonstration of the fall/winter grazing system during the 10-year period from 2008 to 2017. Pasture designations HZ5, HZ6, HZ7, HZ8, EYU4, EYU5, EYU6, OYU3, OYU4, OYU5, and OYU6 are illustrated in the grazing plan aerial photo.

Exhibit A2: Table 3

	Units #06, #07, #08, #09, #10, #11, #4307, Ozark										
Year	**HZ5**	**HZ6**	**HZ7**	**HZ8**	**EYU4**	**EYU5**	**EYU6**	**OYU3**	**OYU4**	**OYU5**	**OYU6**
2008	No	Yes	No	No	Yes	Yes	Yes	No	No	No	No
2009	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
2010	No	No	Yes	No	Yes	Yes	Yes	No	No	No	No
2011	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
2012	No	No	No	No	Yes	Yes	Yes	No	No	No	No
2013	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
2014	No	Yes	No	No	Yes	Yes	Yes	No	No	No	No
2015	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
2016	No	No	Yes	No	Yes	Yes	Yes	No	No	No	No
2017	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes


Cornwell Conservation Easement
Units #06 to #11, & OYU6 (Ozark)
HZ5
OYU3
Tampico Rd
OYU4
EYU4
HZ6
OYU6
OYU5
EYU5
EYU5
Riverside Rd.
HZ7
= Habitat Zone
= Livestock Even Year Use
= Livestock Odd Year Use
= Animal Husbandry Use
= Proposed Fence
Tampico Highway
EYU6
HZ8

Tampico Area: #4307

Lower Well Pasture (LW) and Upper Well Pasture (designated as "UW"), located immediately south of Highway 2 on Buggy Creek, currently receive annual winter use by 300 head of livestock in each pasture. The management plan goal is to follow the Standards for Livestock Grazing found in Exhibit C of the Conservation Easement, providing the ranch with opportunity to rest both Lower Well and Upper Well pastures every other year. However, at this time the option to rest these pastures every other year and follow the Grazing Standards does not exist. As more land becomes available (through land purchases or lease agreements, or when proposed permanent native vegetation cover fields mature in the "Desert," located in the area designated as "Out" of the grazing plans,) this option will be pursued, but if acquired land is no longer available (a land lease expires) the following option will be pursued as a default-grazing plan.

Livestock use within Lower Well Pasture, Upper Well Pasture, and a newly created Highway 2 Pasture, will be permitted by a revolving 3 pasture system consisting of staggered, two year consecutive use, one year rest cycles for each pasture. When grazed, livestock will be permitted between the starting date of November 15 and ending date of April 15, annually.

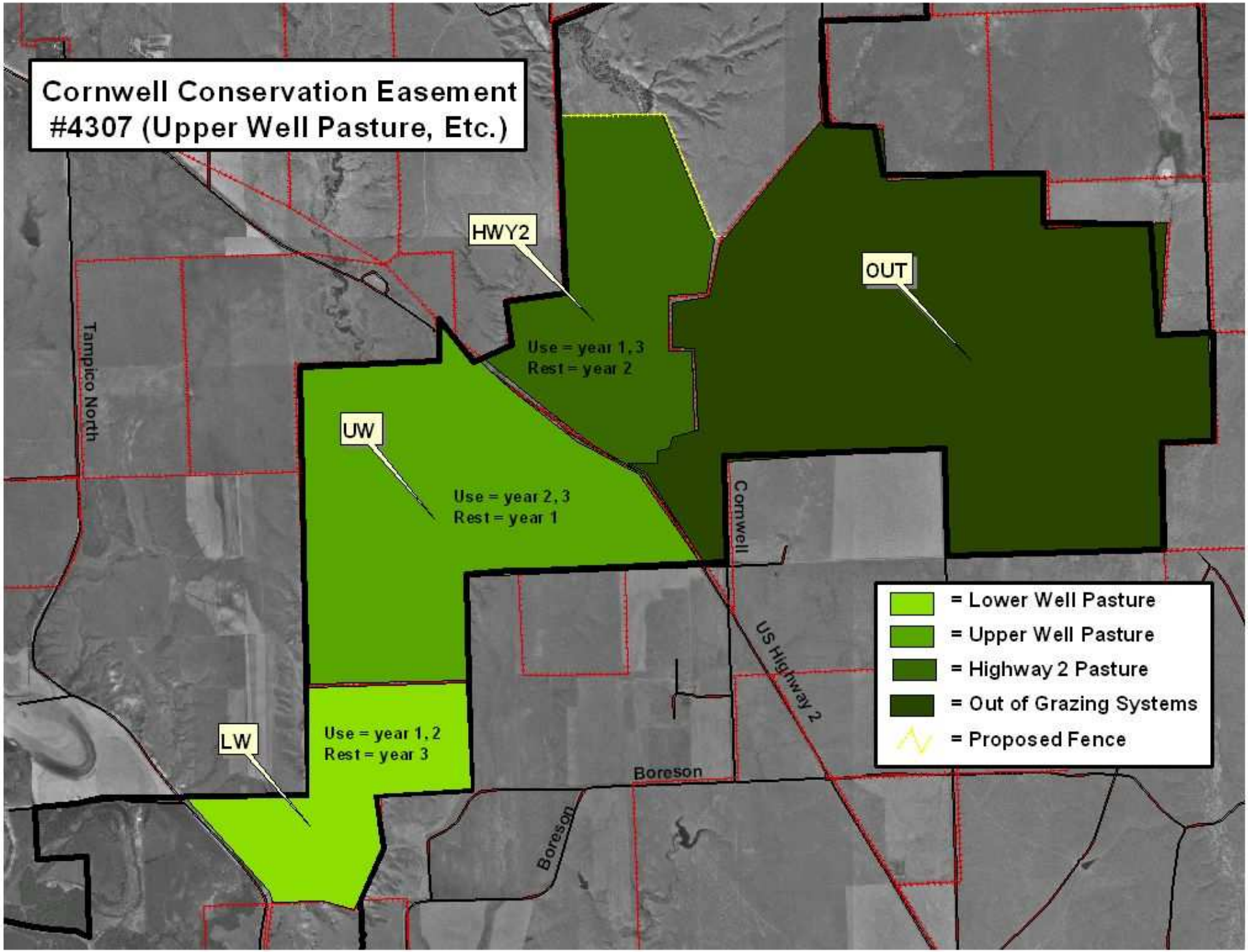
Livestock use within Lower Well and Upper Well pastures will coordinate with a newly created Highway 2 pasture, located immediately north of Highway 2. This pasture is designated as HWY2. This pasture will be created from portions of two pastures illustrated in Exhibit A1, Figure 2. It will consist of the land west by the feedlots located in the western portion of the land designated as "Out" of the grazing system, and also along Buggy Creek in the pasture designated LBW1. A total of 2.7 miles of fence will need to be constructed in order for this system to work. Creation of this pasture will require additional water development.

Riparian vegetation will be assessed. Should riparian habitat be determined to need additional grazing protection, additional habitat zones (HZs) will be created by strategically fencing these areas, while recognizing the importance that remaining livestock areas contain wooded and/or sheltered areas that can provide protection from winter storms. Selected sites should have adequate over story to provide needed protection, but lack an intact under story (shrubs, seedling trees, and pole-size trees). These sites will meet livestock needs; yet will not compromise additional riparian habitat health. These areas will be determined if/when habitat zone fences are constructed, and this process may take several (30+) years.

Refer to Table 5 for an illustrated demonstration of the fall/winter grazing system during the 10-year period from 2008 to 2017. Pasture designations LW, UW, and HWY2 are illustrated in the grazing plan aerial photo.

Exhibit A2: Table 5

	Units #4307 (Lower Well, Upper Well and Highway 2 Pastures)		
Year	**LW**	**UW**	**HWY2**
2008	Yes	No	Yes
2009	Yes	Yes	No
2010	No	Yes	Yes
2011	Yes	No	Yes
2012	Yes	Yes	No
2013	No	Yes	Yes
2014	Yes	No	Yes
2015	Yes	Yes	No
2016	No	Yes	Yes
2017	Yes	No	Yes


Cornwell Conservation Easement
#4307 (Upper Well Pasture, Etc.)
HWY2
OUT
Use = year 1, 3
Rest = year 2
UW
Use = year 2, 3
Rest = year 1
LW
Use = year 1, 2
Rest = year 3
Tampico North
Cornwell
US Highway 2
Boreson
Boreson
= Lower Well Pasture
= Upper Well Pasture
= Highway 2 Pasture
= Out of Grazing Systems
= Proposed Fence

Glasgow Area: Units #12, #13

Fences will not be constructed in Unit #12, as no livestock will be grazed on this unit (HZ9). Habitat zone fences will be constructed in various locations in Unit #13 to protect several locations designated for permanent cover restorations (HZZ10 – HZZ16). A total of 4.7 miles of fence will need to be constructed in order for this system to work.

Livestock will be permitted within designated "Even Year Use" area (EYU7) every even year, and will be permitted within designated "Odd Year Use" area (OYU7) every odd year, between the starting date of November 15 and ending date of April 15.

When winter storms occur where adequate over story is needed to protect livestock, livestock will be permitted in the "Livestock Special Use" area (SU1). Livestock will be permitted within the zone during the storm (usually 3 – 5 days) and then returned to either EYU7 or OYU7 once the storm passes. When SU1 is used, livestock will be fed near the current building site. Riparian vegetation assessments will be formalized to ensure levels of use do not compromise riparian habitat health.

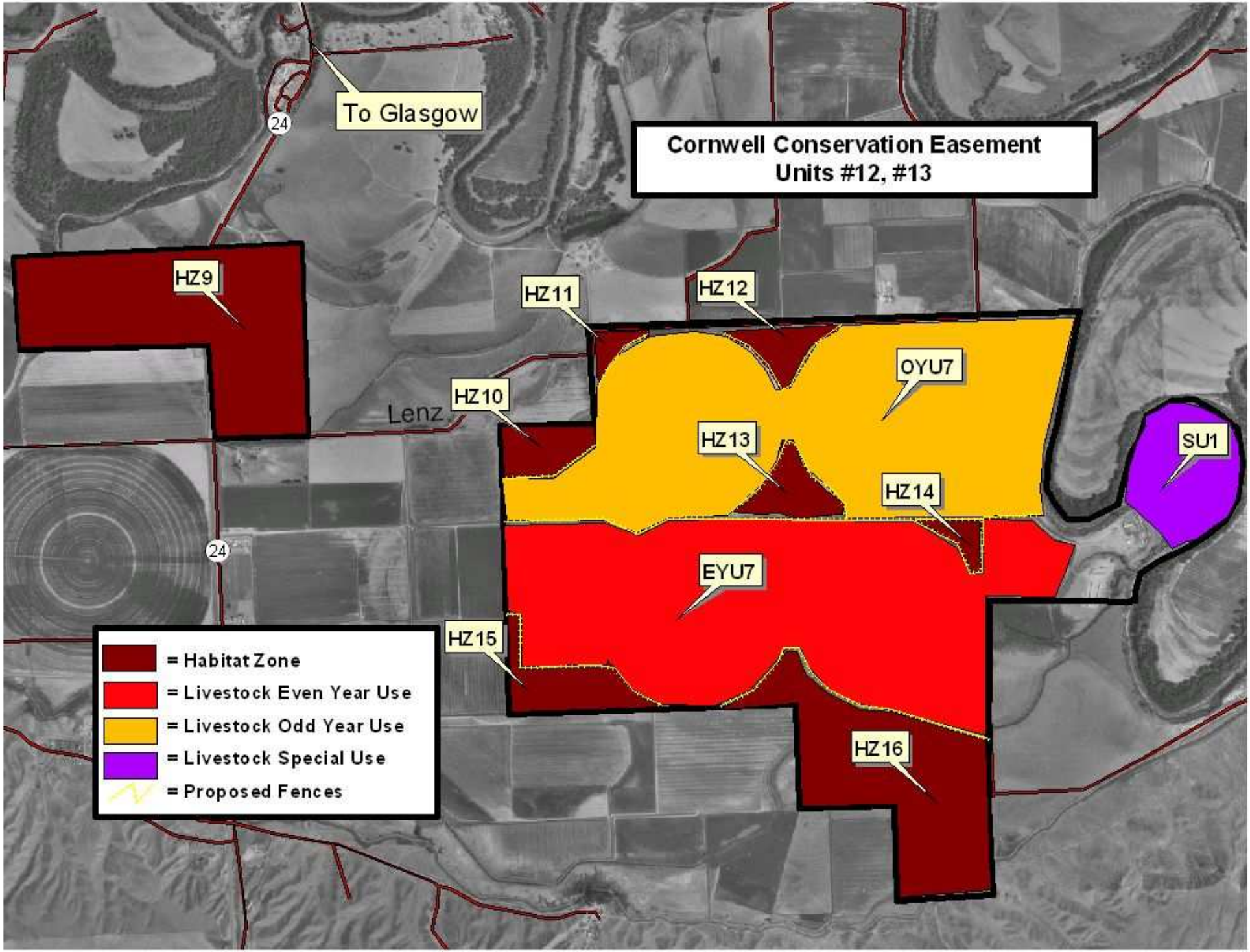
Livestock will not be permitted within the designated "Habitat Zones" (HZ10, HZ11, HZ12, HZ13, HZ14, HZ15). However, when the DNC and permanent cover restorations have established, livestock will be permitted within these HZs, starting November 15 and ending April 15, every other year, depending upon location (either EYU7 or OYU7). Livestock will not be permitted within the designated "Habitat Zones" (HZ09, HZ16).

Refer to Table 6 for an illustrated demonstration of the fall/winter grazing system during a 10-year period. This table will not start with the year 2008 since the DNC and permanent cover restorations need to be established first. Pasture designations HZ9 – HZ16, EYU7, OYU7, and SU1, are illustrated in the grazing plan aerial photo.

Exhibit A2: Table 6

	Units #12, #13										
Year	**HZ9**	**HZ10**	**HZ11**	**HZ12**	**HZ13**	**HZ14**	**HZ15**	**HZ16**	**SU1**	**EYU7**	**OYU7**
2018	No	No	No	No	No	Yes	Yes	No	Yes*	Yes	No
2019	No	Yes	Yes	Yes	Yes	No	No	No	Yes*	No	Yes
2020	No	No	No	No	No	Yes	Yes	No	Yes*	Yes	No
2021	No	Yes	Yes	Yes	Yes	No	No	No	Yes*	No	Yes
2022	No	No	No	No	No	Yes	Yes	No	Yes*	Yes	No
2023	No	Yes	Yes	Yes	Yes	No	No	No	Yes*	No	Yes
2024	No	No	No	No	No	Yes	Yes	No	Yes*	Yes	No
2025	No	Yes	Yes	Yes	Yes	No	No	No	Yes*	No	Yes
2026	No	No	No	No	No	Yes	Yes	No	Yes*	Yes	No
2027	No	Yes	Yes	Yes	Yes	No	No	No	Yes*	No	Yes
2028	No	No	No	No	No	Yes	Yes	No	Yes*	Yes	No
2029	No	Yes	Yes	Yes	Yes	No	No	No	Yes*	No	Yes

*Storm use only.


To Glasgow
24
Cornwell Conservation Easement
Units #12, #13
HZ9
HZ11
HZ12
OYU7
HZ10
Lenz
HZ13
SU1
HZ14
24
EYU7
HZ15
HZ16
= Habitat Zone
= Livestock Even Year Use
= Livestock Odd Year Use
= Livestock Special Use
= Proposed Fences

Glasgow Area: Units #14, #15, #16

Fences will not be constructed in Units #14, #15, and #16, as no livestock are grazed in Units #15 and #16, as each unit is currently enrolled into CRP. Livestock are grazed annually each spring in a portion of Unit #14 (AU3), but the rest of Unit #14 is enrolled into DNC.

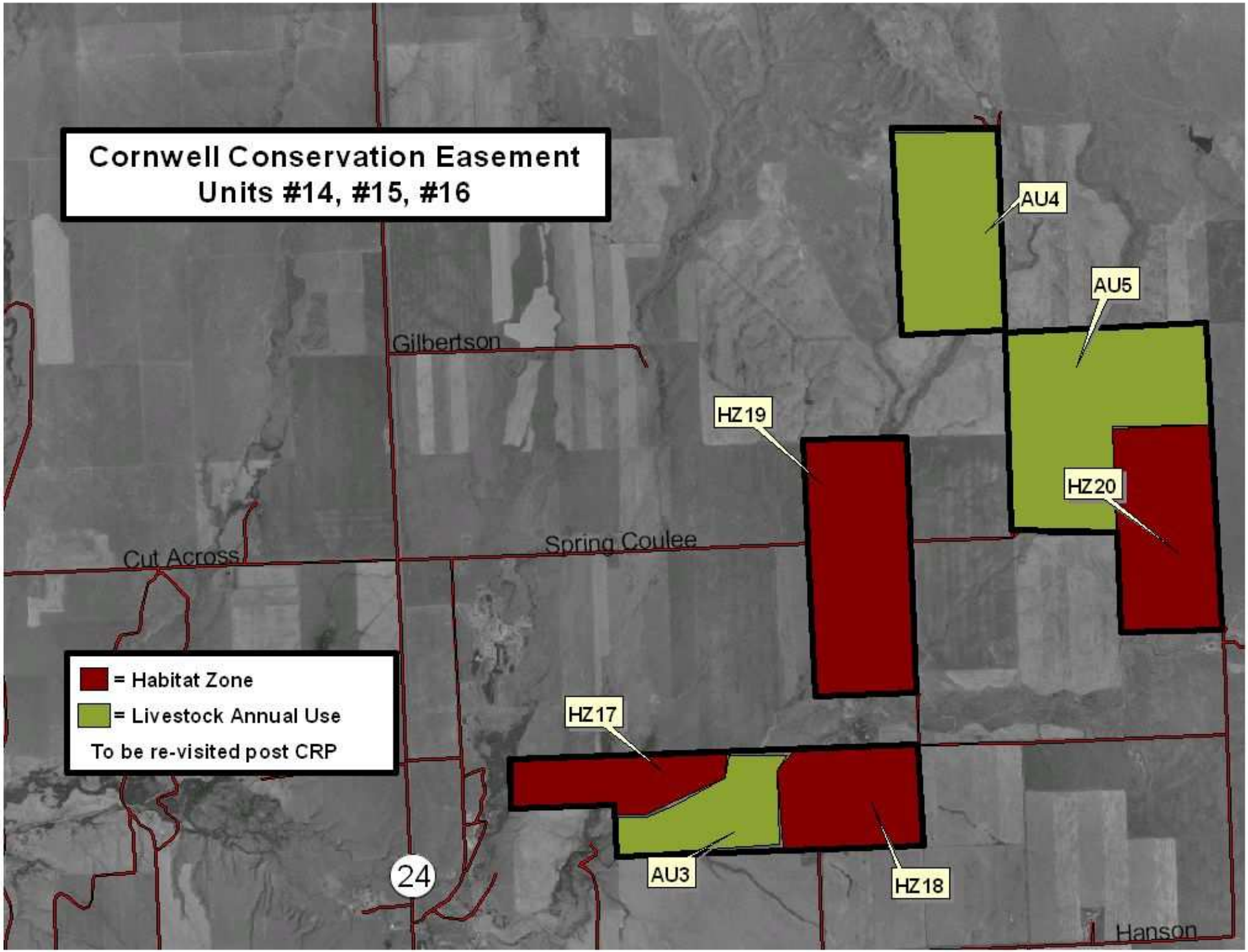
Livestock will be excluded from the CRP fields (HZ17, HZ18, HZ19, HZ20) unless allowed by emergency provisions within the CRP enrollment. Livestock will be permitted within designated "Livestock Annual Use" areas each year, between the starting date of April 1 and ending date of June 1, annually. This includes AU3. Livestock will be allowed in the BLM pastures as needed annually (AU4, AU5).

The management plan for Units #14, #15, and #16 will need to be re-visited once the CRP acres on these units expire. A more detailed grazing plan providing for habitat improvements will be determined at that time. The intent of that plan will follow provisions and/or options given within other grazing plans on other Units in this easement.

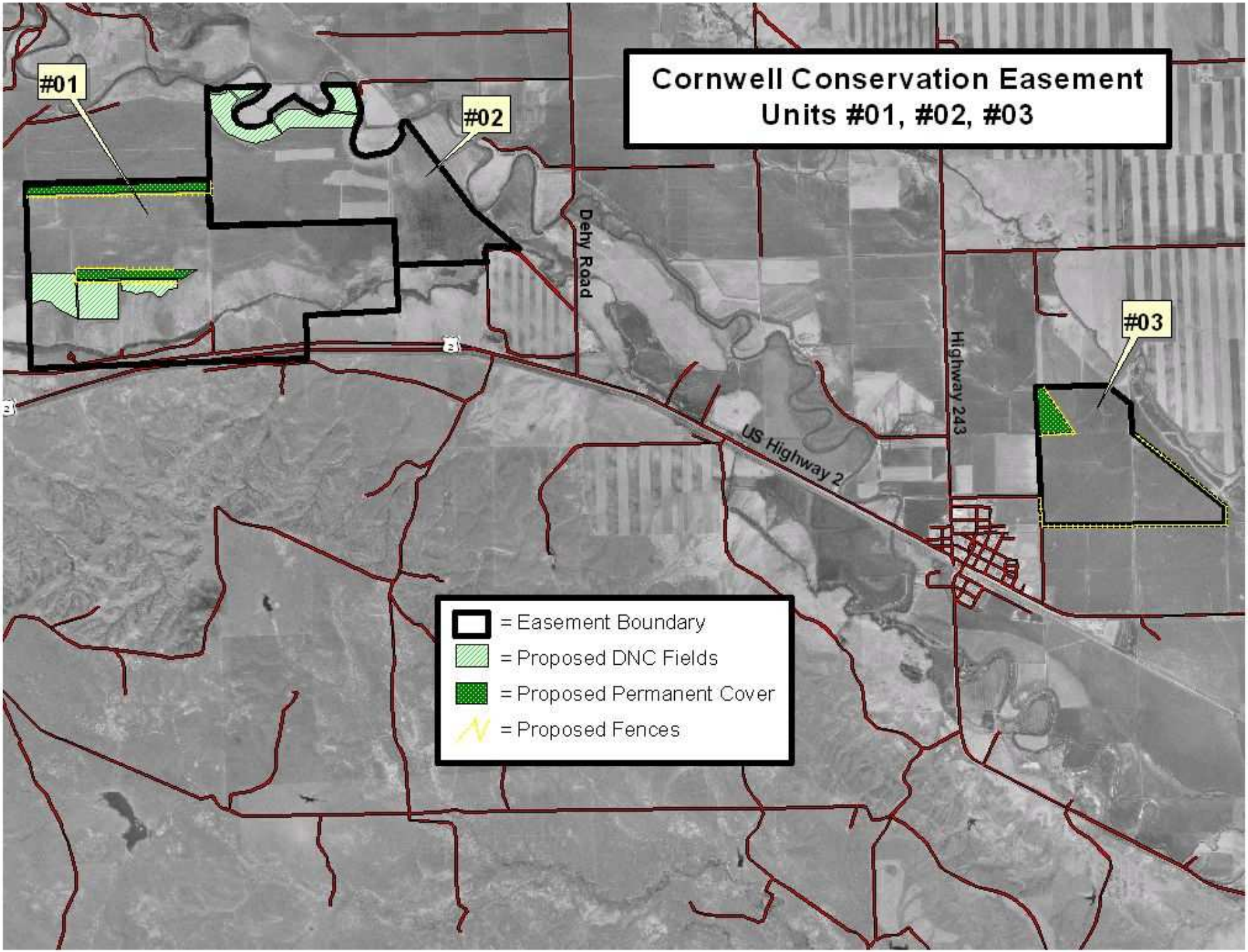
Refer to Table 7 for an illustrated demonstration of the grazing system during the 10-year period from 2008 to 2017, or until the plan is revisited once the CRP acres expire. Pasture designations HZ17, HZ18, HZ19, HZ20, AU3, AU4, and AU5, are illustrated in the grazing plan aerial photo.

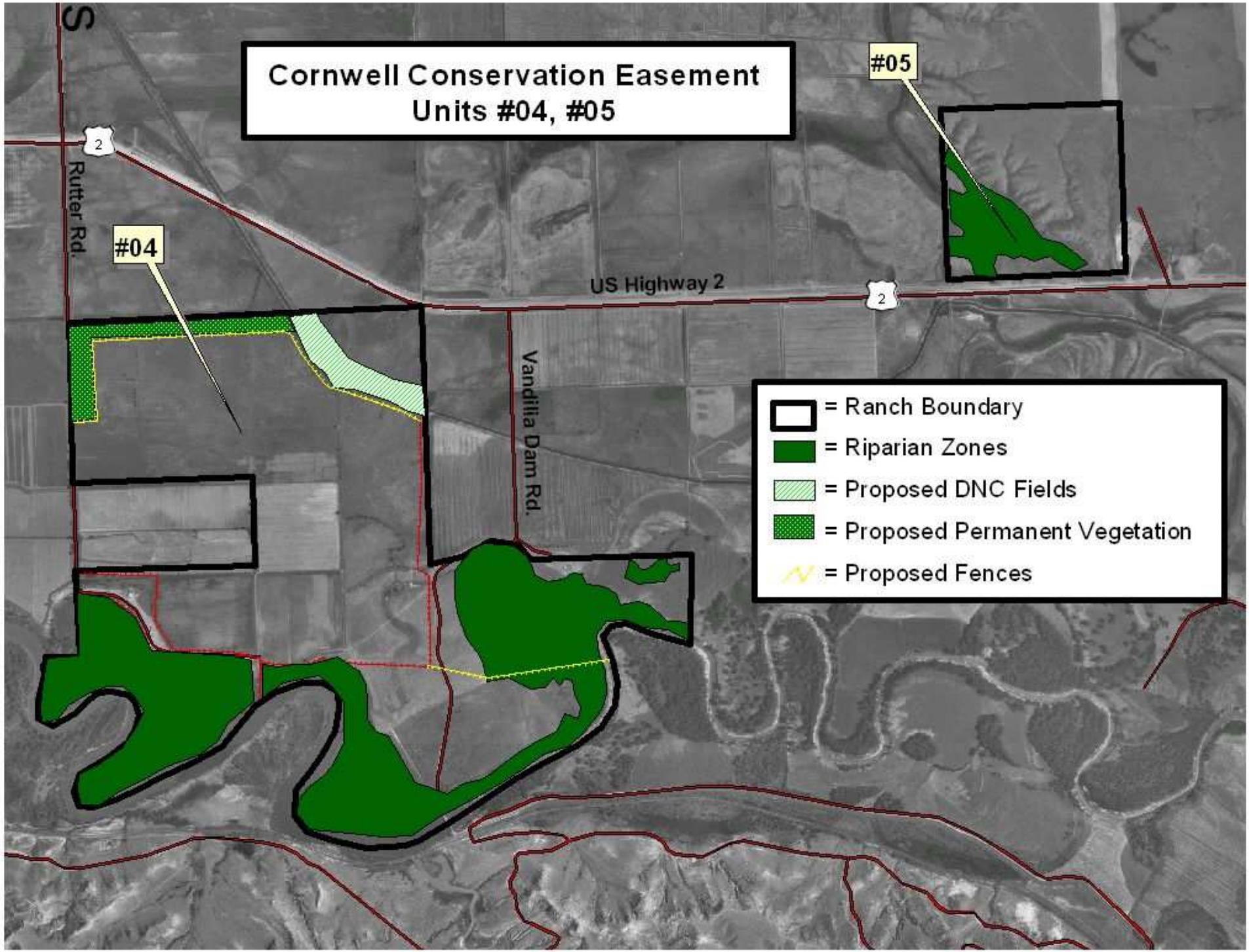
Exhibit A2: Table 7

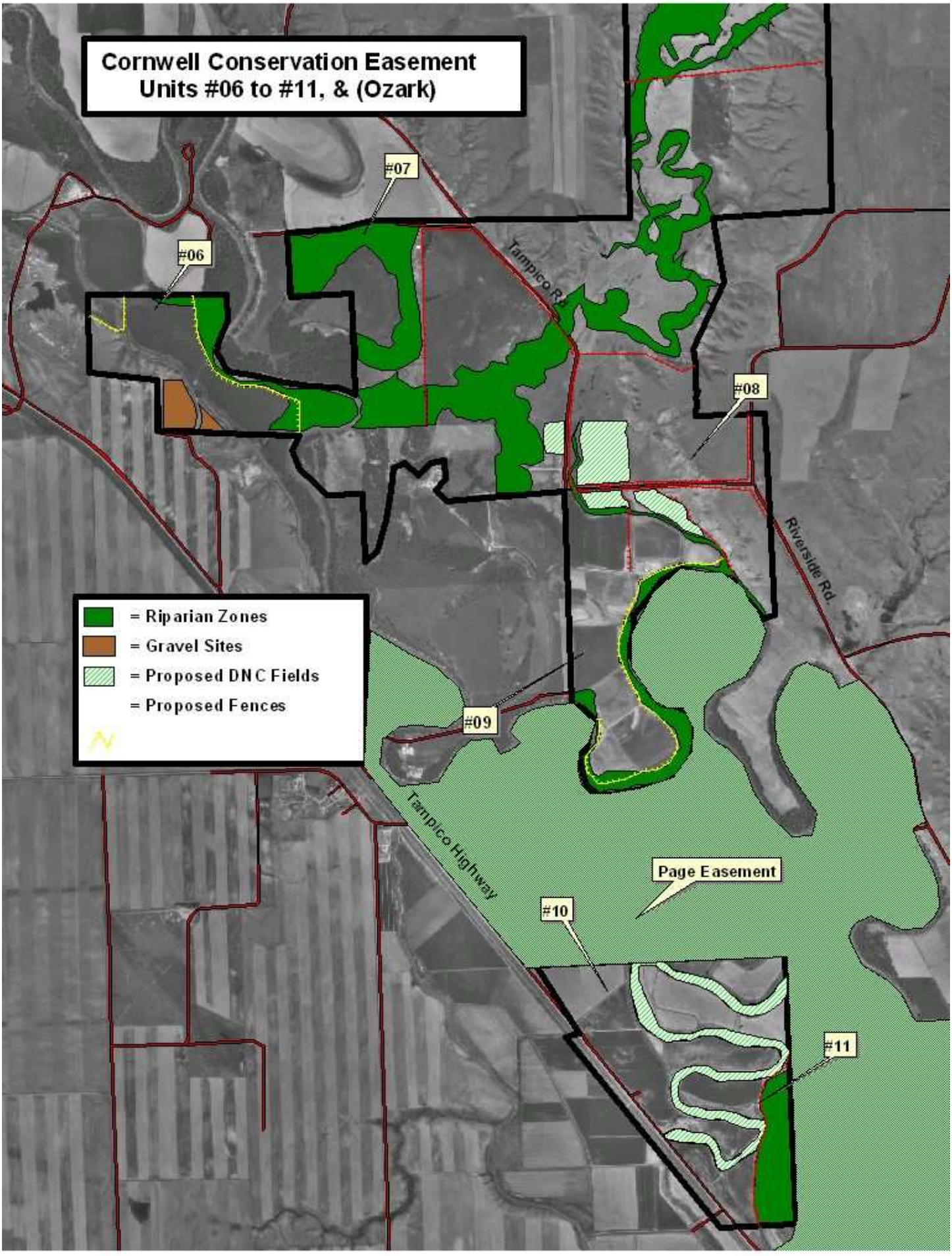
	Units #14, #15, #16						
Year	**HZ17**	**HZ18**	**HZ19**	**HZ20**	**AU3**	**AU4**	**AU5**
2008	No	No	No	No	Yes	Yes	Yes
2009	No	No	No	No	Yes	Yes	Yes
2010	No	No	No	No	Yes	Yes	Yes
2011	No	No	No	No	Yes	Yes	Yes
2012	No	No	No	No	Yes	Yes	Yes
2013	No	No	No	No	Yes	Yes	Yes
2014	No	No	No	No	Yes	Yes	Yes
2015	No	No	No	No	Yes	Yes	Yes
2016	No	No	No	No	Yes	Yes	Yes
2017	No	No	No	No	Yes	Yes	Yes

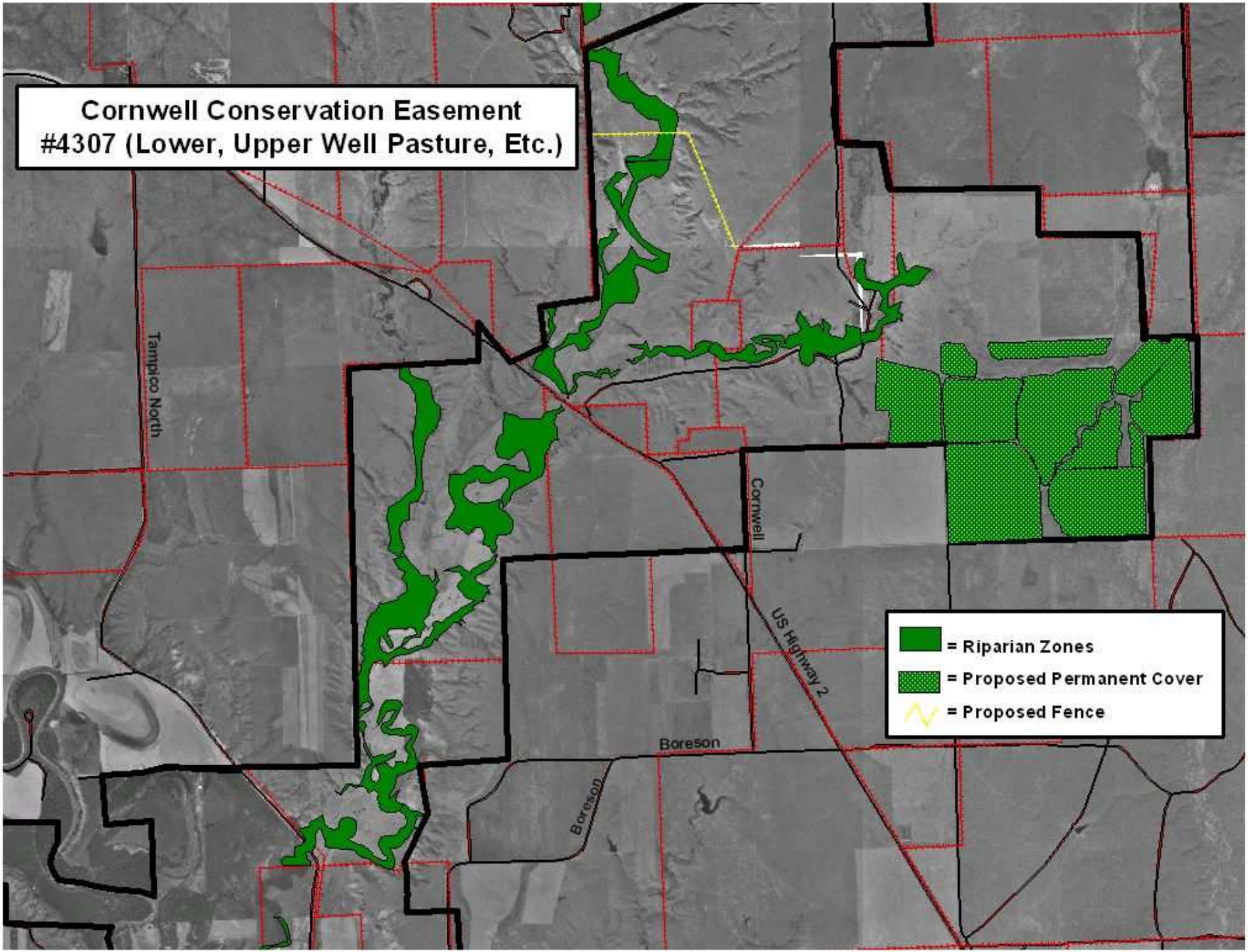

Cornwell Conservation Easement
Units #14, #15, #16
AU4
AU5
Gilbertson
HZ19
HZ20
Spring Coulee
Cut Across
= Habitat Zone
= Livestock Annual Use
To be re-visited post CRP
HZ17
AU3
HZ18
24
Hanson

<u>Exhibit B:</u> Proposed Enhancements (DNC, Permanent Cover, Fences)


Cornwell Conservation Easement
Units #01, #02, #03
#01
#02
#03
Dehy Road
Highway 243
US Highway 2
= Easement Boundary
= Proposed DNC Fields
= Proposed Permanent Cover
= Proposed Fences


Cornwell Conservation Easement
Units #04, #05
#05
#04
Rutter Rd.
US Highway 2
Vandilia Dam Rd.
2
2
= Ranch Boundary
= Riparian Zones
= Proposed DNC Fields
= Proposed Permanent Vegetation
= Proposed Fences


Cornwell Conservation Easement
Units #06 to #11, & (Ozark)
#07
#06
Tampico Rd.
#08
Riverside Rd.
= Riparian Zones
= Gravel Sites
= Proposed DNC Fields
= Proposed Fences
#09
Tampico Highway
Page Easement
#10
#11


Cornwell Conservation Easement
#4307 (Lower, Upper Well Pasture, Etc.)
Tampico North
Cornwell
US Highway 2
Boreson
Boreson
= Riparian Zones
= Proposed Permanent Cover
= Proposed Fence

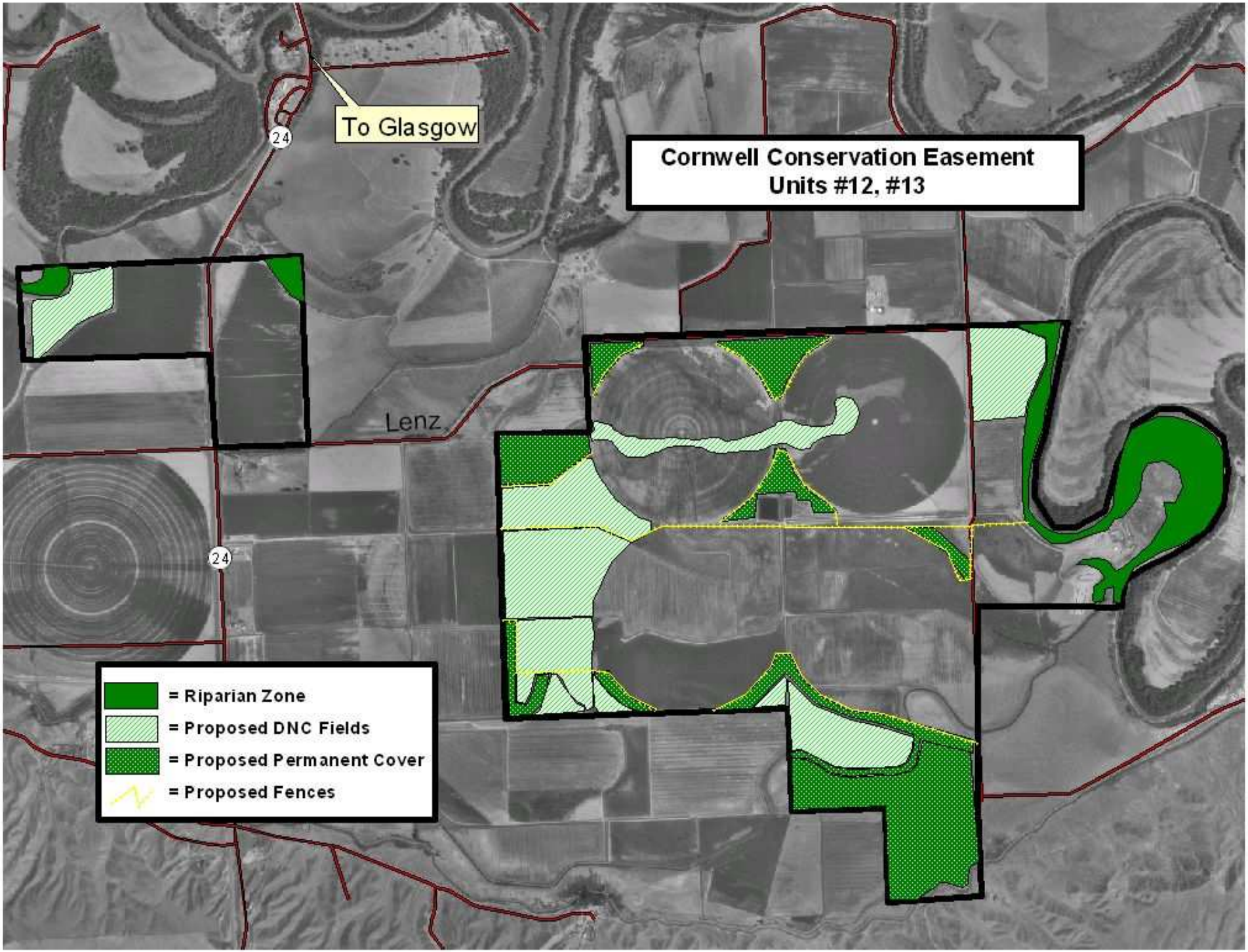
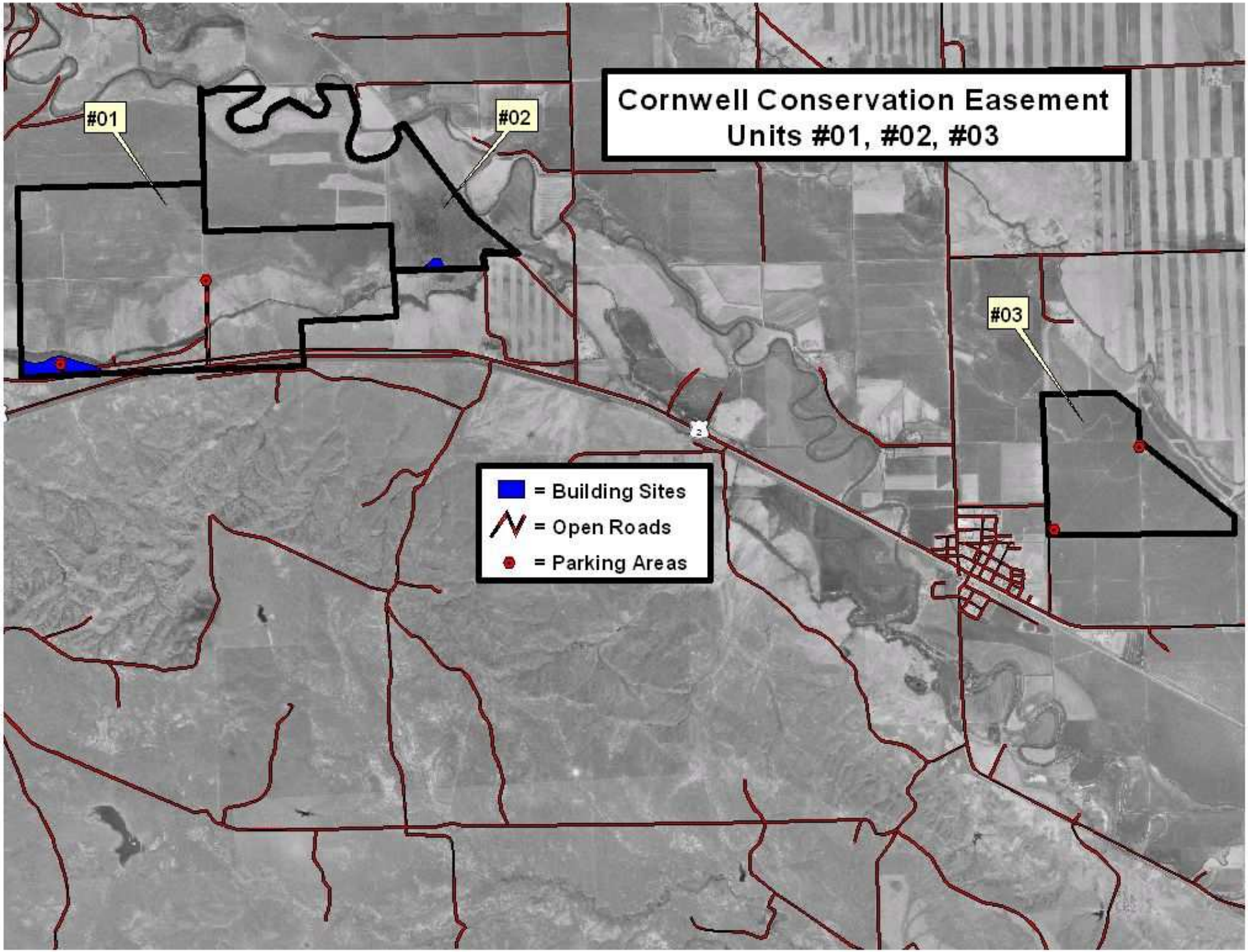
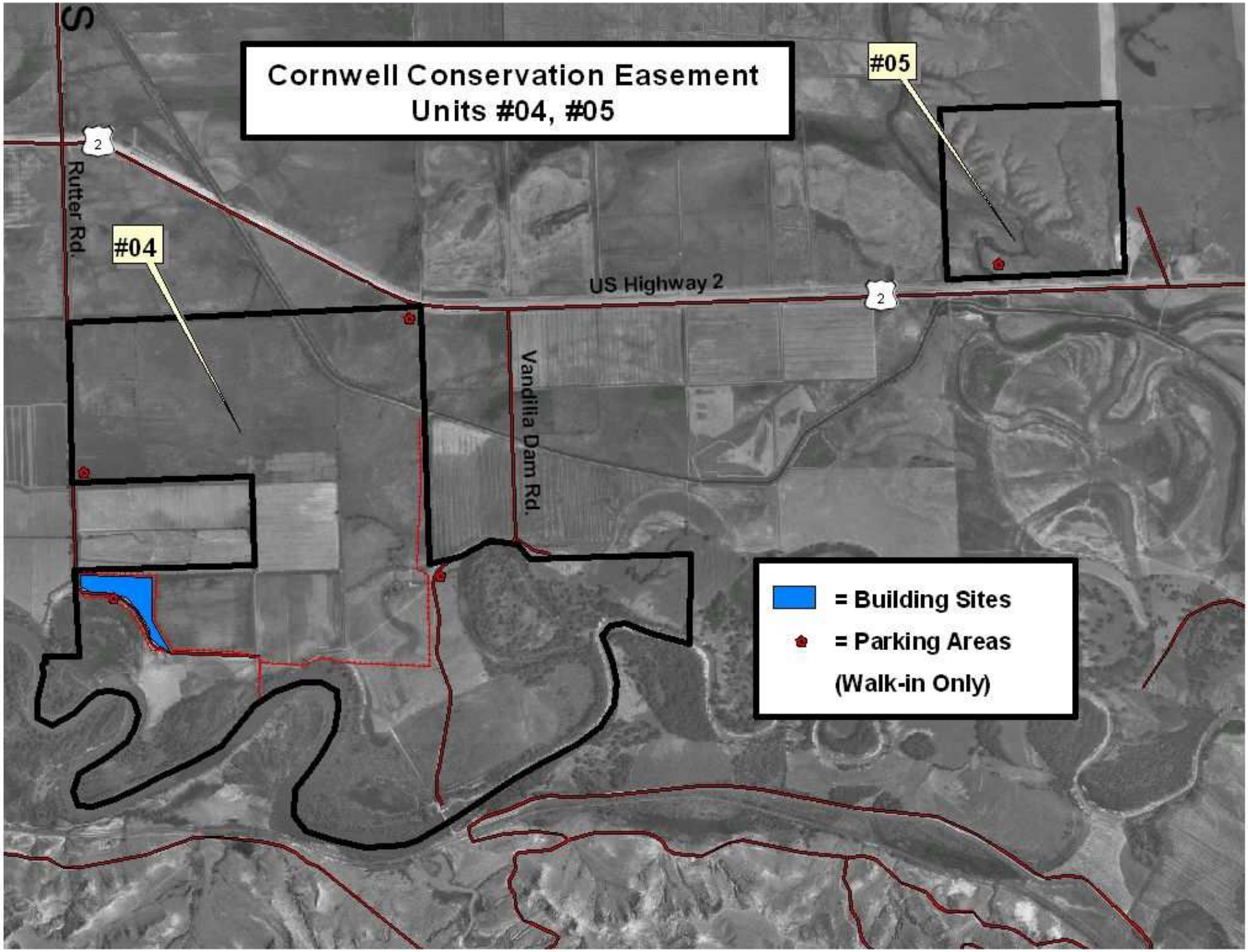
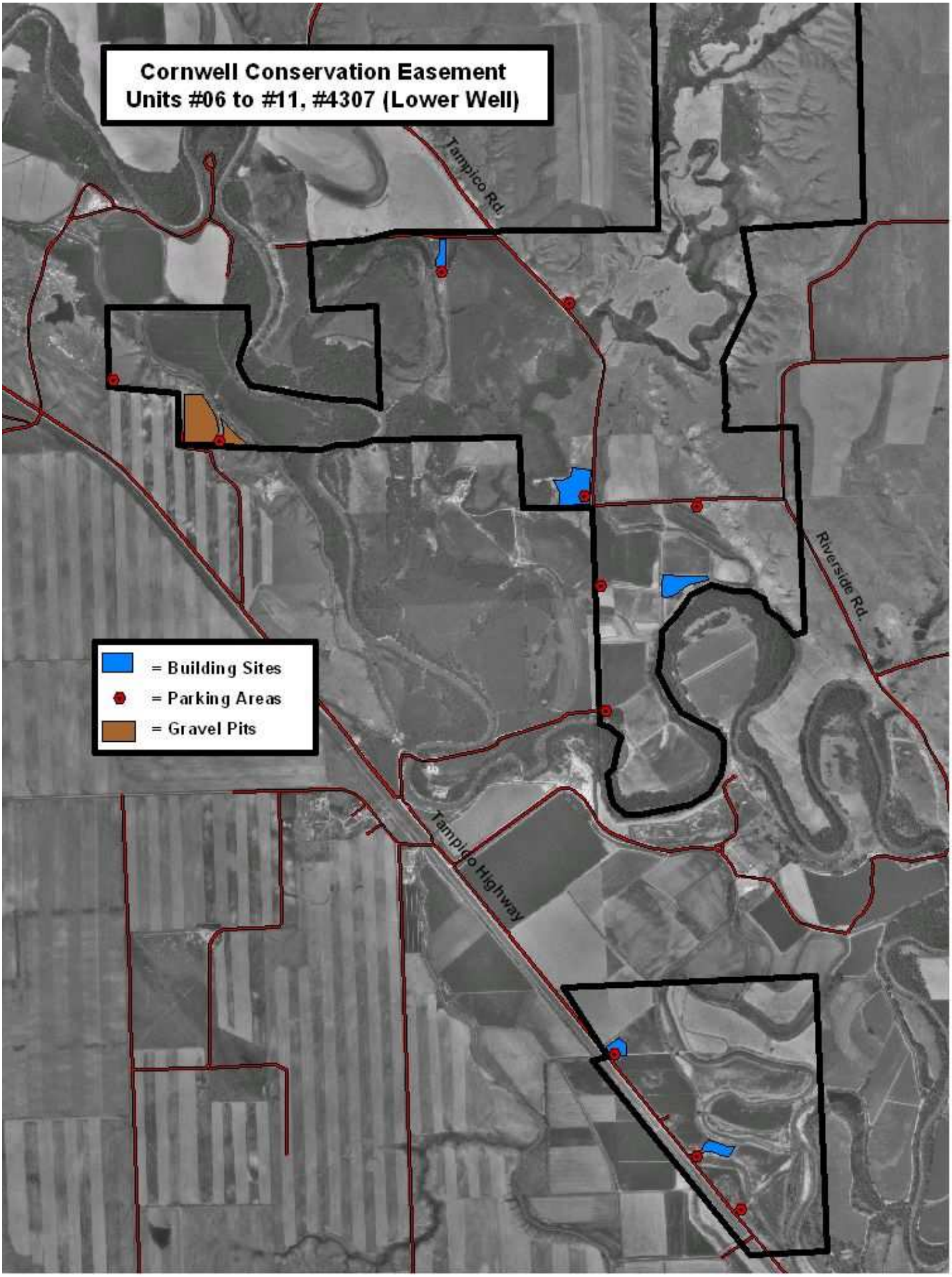
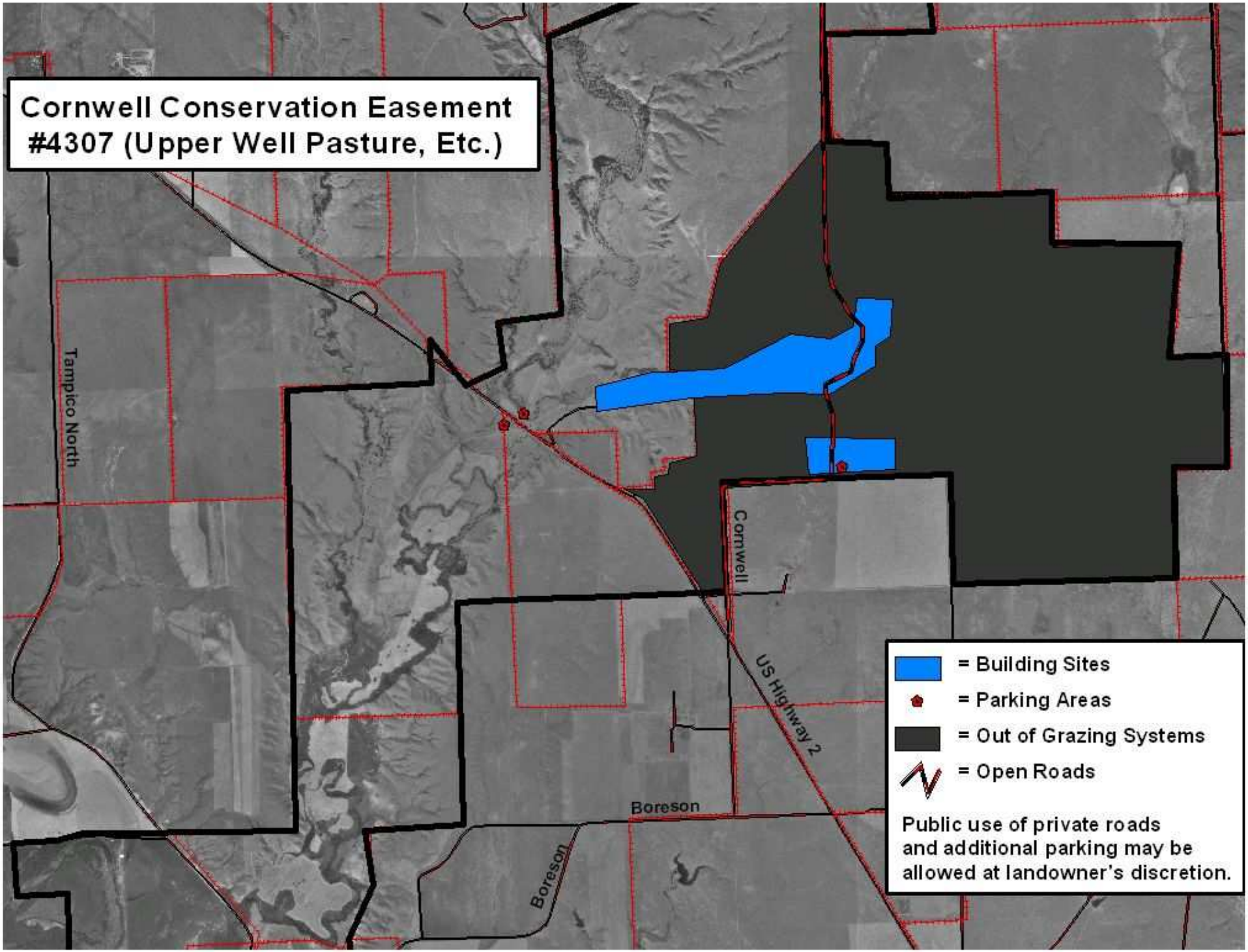

To Glasgow
24
Cornwell Conservation Easement
Units #12, #13
Lenz
24
= Riparian Zone
= Proposed DNC Fields
= Proposed Permanent Cover
= Proposed Fences

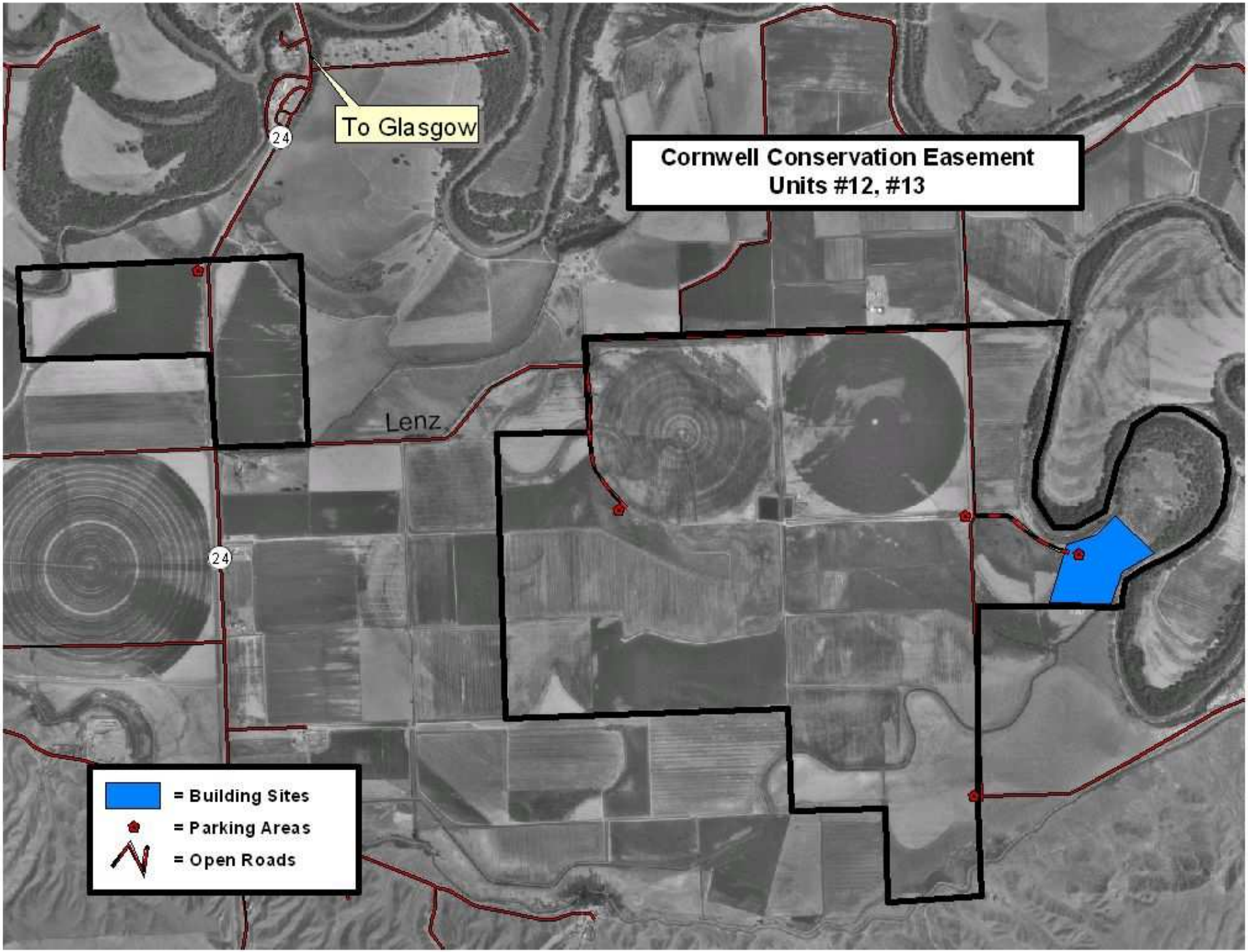
Exhibit C: Travel Plan (Building Sites, Parking Areas, Open Roads)

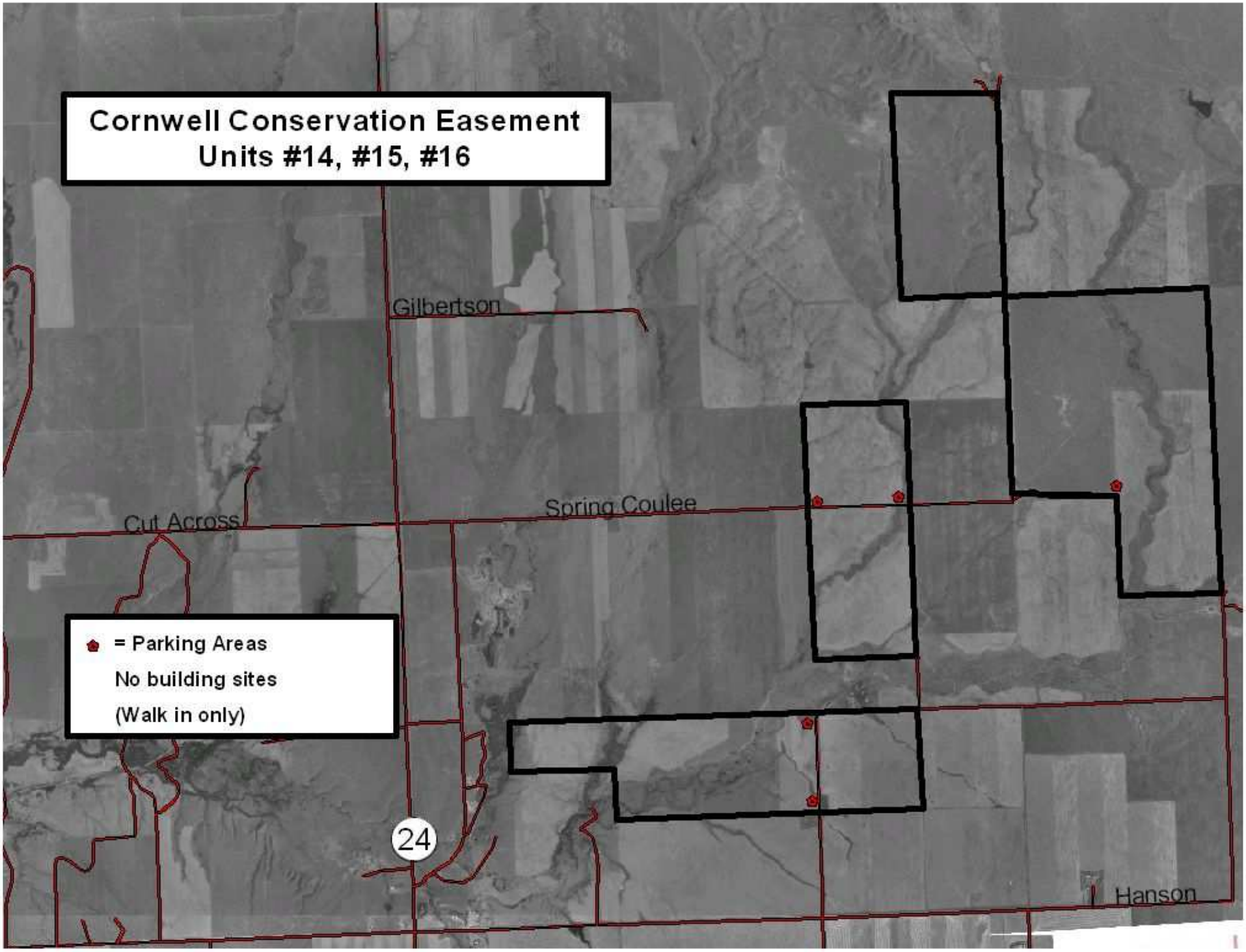

Cornwell Conservation Easement
Units #01, #02, #03
#01
#02
#03
= Building Sites
= Open Roads
= Parking Areas


Cornwell Conservation Easement
Units #04, #05
#05
#04
US Highway 2
2
2
Rutter Rd.
Vandilia Dam Rd.
= Building Sites
= Parking Areas
(Walk-in Only)


Cornwell Conservation Easement
Units #06 to #11, #4307 (Lower Well)
Tampico Rd.
Riverside Rd.
Tampico Highway
= Building Sites
= Parking Areas
= Gravel Pits


Cornwell Conservation Easement
#4307 (Upper Well Pasture, Etc.)
Tampico North
Cornwell
US Highway 2
Boreson
Boreson
= Building Sites
= Parking Areas
= Out of Grazing Systems
= Open Roads
Public use of private roads
and additional parking may be
allowed at landowner's discretion.


To Glasgow
24
Cornwell Conservation Easement
Units #12, #13
Lenz
24
= Building Sites
= Parking Areas
= Open Roads


Cornwell Conservation Easement
Units #14, #15, #16
Gilbertson
Spring Coulee
Cut Across
= Parking Areas
No building sites
(Walk in only)
24
Hanson

APPENDIX III

CORNWELL RANCH

CONSERVATION EASEMENT

SOCIO-ECONOMIC ASSESSMENT

MONTANA FISH, WILDLIFE AND PARKS

Prepared by:
Rob Brooks
October 2007

I. INTRODUCTION

House Bill 526, passed by the 1987 Legislature (MCA 87-1-241 and MCA 87-1-242), authorizes Montana Fish, Wildlife and Parks (MFWP) to acquire an interest in land for the purpose of protecting and improving wildlife habitat. These acquisitions can be through fee title, conservation easements, or leasing. In 1989, the Montana legislature passed House Bill 720 requiring that a socioeconomic assessment be completed when land is acquired for the purpose of protecting wildlife habitat using Habitat Montana monies. These assessments evaluate the significant social and economic impacts of the purchase on local governments, employment, schools, and impacts on local businesses.

This socioeconomic evaluation addresses the purchase of a conservation easement on the Cornwell property. The report addresses the physical and institutional setting as well as the social and economic impacts associated with the proposed conservation easement.

II. PHYSICAL AND INSTITUTIONAL SETTING

A. Property Description

The 24,000-acre Cornwell Ranch properties are located in Valley and Phillips and consist of isolated parcels of land along the Milk River. The environmental assessment and management plan provides a detailed description and map of the property.

B. Habitat and Wildlife Populations

The upland portions of the ranch are mainly sagebrush grasslands and the riparian bottomlands are generally hardwood forest. The Cornwell Ranch property supports whitetail deer, antelope, mule deer, waterfowl, a large number of upland game birds as well as nongame migratory songbirds and raptors.

C. Current Use

The Cornwell Ranch is currently a working ranch.

D. Management Alternatives

1) Purchase a conservation easement on the property by MFWP
2) No purchase

MFWP Purchase of Conservation Easement

The intent of the Cornwell Ranch conservation easement is to protect and enhance the wildlife habitat currently found on the property while maintaining the agricultural character of the property. Please refer to the Deed of Conservation Easement for a thorough explanation of the terms for this easement between MFWP and the Cornwell Ranch.

No Purchase Alternative

The second alternative, the no purchase option, does not guarantee the protection the native habitats nor protect this land from changes in land uses, or secure access for the public into the future.

This alternative requires some assumptions since use and management of the property will vary depending on what the current owners decide to do with the property if MFWP does not purchase a conservation easement.

The economic impacts associated with this alternative are beyond the scope of this assessment and have not been estimated.

III. SOCIAL AND ECONOMIC IMPACTS

Section II identified the management alternatives this report addresses. The purchase of a conservation easement will provide long-term protection of important wildlife habitat, keep the land in private ownership and provide for public access for hunting. Section III quantifies the social and economic consequences of the two management alternatives following two basic accounting stances: financial and local area impacts.

Financial impacts address the cost of the conservation easement to MFWP and discuss the impacts on tax revenues to local government agencies including school districts.

Expenditure data associated with the use of the property provides information for analyzing the impacts these expenditures may have on local businesses (i.e. income and employment).

A. Financial Impacts

The conservation easement proposed on the Cornwell Ranch will be secured by dollars from the Habitat Montana Program and the Upland Game Bird Enhancement Program, both of which are funded by sportsmen dollars. MFWP's financial obligation is between $4.75 – $5.25 million.

Maintenance/management costs related to the easement are associated with monitoring the property to insure the easement terms are being followed.

The financial impacts to local governments are the potential changes in tax revenues resulting from the purchase of the conservation easement. The conservation easement will not change the ownership of the property nor will it change the type or level of agricultural use on the property. Therefore, the purchase of a conservation easement on this land will not impact the current level of taxes paid to Valley and Phillips County.

B. Economic Impacts

The purchase of a conservation easement will not affect the agricultural activities on the Cornwell Ranch. The number of cattle run on the property will not change however a rest rotation type grazing system will be implemented under the terms of the conservation easement. This grazing system requires the installation of water development and approximately 26 miles of fencing and repair to some existing fences at an estimated cost of $350,000. This activity will have a positive economic impact for local agricultural service businesses.

.

The easement will provide public access for hunting and fishing. The minimum number of hunters and number of days allowed during the fall hunting season are defined in the conservation easement agreement. A conservation easement on this property will enhance hunter opportunity in the northeast region of the state. The economic activity hunting provides to rural communities like Glasgow, Havre, Malta, etc. is significant and public access is a critical component to maintaining this economic contribution to local economies. Based on the minimum number of hunter days specified in the conservation easement, the hunters utilizing the Cornwell properties would contribute about $115,000 to businesses in the local economy on an annual basis.

FINDINGS AND CONCLUSIONS

The acquisition of a conservation easement on the Cornwell Ranch will provide long-term protection for wildlife habitat, maintain the agricultural integrity of the land, and ensure public hunting opportunities.
The purchase of a conservation easement by MFWP will not cause a reduction in tax revenues on this property from their current levels to Valley and Phillips County.

The agricultural/ranching operations will continue at their current levels. The financial impacts of the easement on local businesses will be neutral to slightly positive in both the short and long run.

Hunter and to a lesser degree angler expenditures will continue to support local businesses due to the ongoing public access provided by the purchase of this conservation easement.